

NEW SOURCE CONSTRUCTION PERMIT

OFFICE OF AIR MANAGEMENT

Dynamax Corporation
53103 Northland Drive
Elkhart, Indiana 46515

(herein known as the Permittee) is hereby authorized to construct and operate subject to the conditions contained herein, the emission units described in Section A (Source Summary) of this permit.

This permit is issued to the above mentioned company under the provisions of 326 IAC 2-5.1, 326 IAC 2-6.1 and 40 CFR 52.780, with conditions listed on the attached pages.

Operation Permit No.: CP 039-12002-00536	
Issued by: Paul Dubenetzky, Branch Chief Office of Air Management	Issuance Date:

TABLE OF CONTENTS

A SOURCE SUMMARY

- A.1 General Information [326 IAC 2-5.1-3(c)] [326 IAC 2-6.1-4(a)]
- A.2 Emission Units and Pollution Control Equipment Summary
- A.3 Part 70 Permit Applicability [326 IAC 2-7-2]

B GENERAL CONSTRUCTION CONDITIONS

- B.1 Permit No Defense [IC 13]
- B.2 Definitions
- B.3 Effective Date of the Permit [IC 13-15-5-3]
- B.4 Revocation of Permits [326 IAC 2-1.1-9(5)]
- B.5 Modification to Permit [326 IAC 2]
- B.6 Minor Source Operating Permit [326 IAC 2-6.1]

C SOURCE OPERATION CONDITIONS

- C.1 PSD Minor Source Status [326 IAC 2-2][40 CFR 52.21]
- C.2 Preventive Maintenance Plan [326 IAC 1-6-3]
- C.3 Permit Revision [326 IAC 2-5.1-3(e)(3)] [326 IAC 2-6.1-6]
- C.4 Source Modification [326 IAC 2-7-10.5]
- C.5 Inspection and Entry [326 IAC 2-7-6(2)]
- C.6 Transfer of Ownership or Operation [326 IAC 2-6.1-6(d)(3)]
- C.7 Permit Revocation [326 IAC 2-1.1-9]
- C.8 Opacity [326 IAC 5-1]
- C.9 Fugitive Dust Emissions [326 IAC 6-4]
- C.10 Performance Testing [326 IAC 3-6][326 IAC 2-1.1-11]
- C.11 Compliance Monitoring [326 IAC 2-1.1-11]
- C.12 Maintenance of Monitoring Equipment [IC 13-14-1-13]
- C.13 Monitoring Methods [326 IAC 3]
- C.14 Compliance Monitoring Plan - Failure to Take Response Steps [326 IAC 1-6]

Record Keeping and Reporting Requirements

- C.15 Malfunctions Report [326 IAC 1-6-2]
- C.16 Annual Emission Statement [326 IAC 2-6]
- C.17 Monitoring Data Availability [326 IAC 2-6.1-2] [IC 13-14-1-3]
- C.18 General Record Keeping Requirements [326 IAC 2-6.1-2]
- C.19 General Reporting Requirements [326 IAC 2-1.1-11] [326 IAC 2-6.1-2] [IC 13-14-1-13]
- C.20 Annual Notification [326 IAC 2-6.1-5(a)(5)]

D.1 Emissions unit OPERATION CONDITIONS - Two (2) Paint Booths, PB₁ and PB₂

Emission Limitations and Standards

- D.1.1 Volatile Organic Compounds (General Reduction Requirements) [326 IAC 8-1-6]
- D.1.2 Particulate Matter (PM) [326 IAC 6-3-2]
- D.1.3 Preventive Maintenance Plan [326 IAC 1-6-3]

Compliance Determination Requirements

- D.1.4 Testing Requirements
- D.1.5 Volatile Organic Compounds (VOC)

Compliance Monitoring Requirements

D.1.6 Particulate Matter (PM)

D.1.7 Monitoring

Record Keeping and Reporting Requirements

D.1.8 Record Keeping Requirements

Annual Notification

Malfunction Report

SECTION A

SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Management (OAM). The information describing the source contained in conditions A.1 through A.3 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

A.1 General Information [326 IAC 2-5.1-3(c)] [326 IAC 2-6.1-4(a)]

The Permittee owns and operates a stationary vehicle production plant which includes motor homes, campers, vans, etc.

Authorized Individual: DeWayne Creighton Jr.
Source Address: 53103 Northland Drive, Elkhart, Indiana 46514
Mailing Address: P.O. Box 1647, Elkhart, Indiana 46515
Phone Number: (219) 262-3474
SIC Code: 3716
County Location: Elkhart
County Status: Attainment for all criteria pollutants
Source Status: Part 70 Permit Program
Minor Source, under PSD or Emission Offset Rules;
Major Source, Section 112 of the Clean Air Act

A.2 Emissions units and Pollution Control Equipment Summary

This stationary source is approved to construct and operate the following emissions units and pollution control devices:

- (a) Two (2) natural gas fired make up air unit, identified as MAU-1 and MAU-2, each with a maximum heat input capacity of 6.875 million (MM) British thermal units (Btu) per hour;
- (b) Welding operation; one (1) steel MIG welding station, with a maximum wire consumption rate of 0.33 pounds of wire per hour (lb wire/hr), four (4) aluminum MIG welding stations, each with a maximum wire consumption rate of 0.50 lb wire/hr, two (2) oxyacetylene flame cutters, each with a maximum cutting rate of 28 inches per minute, and one (1) plasma cutter, with a maximum cutting rate of 155 inches per minute;
- (c) Woodworking operation with a maximum throughput of 1085 pounds of wood per hour, which consists of various woodworking equipment;
- (d) Two (2) paint booths, identified as PB1 and PB2, using HVLP spray guns, using dry filters for overspray control, and exhausting to stacks S1, S2, S3 and S4; and
- (e) One (1) general assembly operation, exhausting to general ventilation.

A.3 Part 70 Permit Applicability [326 IAC 2-7-2]

This stationary source is required to have a Part 70 permit by 326 IAC 2-7-2 (Applicability) because:

- (a) It is a major source, as defined in 326 IAC 2-7-1(22);

- (b) It is a source in a source category designated by the United States Environmental Protection Agency (U.S. EPA) under 40 CFR 70.3 (Part 70 - Applicability).

SECTION B GENERAL CONSTRUCTION CONDITIONS

THIS SECTION OF THE PERMIT IS BEING ISSUED UNDER THE PROVISIONS OF 326 IAC 2-1.1 AND 40 CFR 52.780, WITH CONDITIONS LISTED BELOW.

B.1 Permit No Defense [IC 13]

This permit to construct does not relieve the Permittee of the responsibility to comply with the provisions of the Indiana Environmental Management Law (IC 13-11 through 13-20; 13-22 through 13-25; and 13-30), the Air Pollution Control Law (IC 13-17) and the rules promulgated thereunder, as well as other applicable local, state, and federal requirements.

B.2 Definitions

Terms in this permit shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, any applicable definitions found in IC 13-11, 326 IAC 1-2, and 326 IAC 2-1.1-1 shall prevail.

B.3 Effective Date of the Permit [IC13-15-5-3]

Pursuant to IC 13-15-5-3, this permit becomes effective upon its issuance.

B.4 Revocation of Permits [326 IAC 2-1.1-9(5)]

Pursuant to 326 IAC 2-1.1-9(5)(Revocation of Permits), the Commissioner may revoke this permit if construction is not commenced within eighteen (18) months after receipt of this approval or if construction is suspended for a continuous period of one (1) year or more.

B.5 Modification to Permit [326 IAC 2]

Notwithstanding the Section B condition entitled "Minor Source Operating Permit", all requirements and conditions of this construction permit shall remain in effect unless modified in a manner consistent with procedures established for modifications of construction permits pursuant to 326 IAC 2 (Permit Review Rules).

B.6 Minor Source Operating Permit [326 IAC 2-6.1]

This document shall also become a minor source operating permit pursuant to 326 IAC 2-6.1 when, prior to start of operation, the following requirements are met:

- (a) The attached Affidavit of Construction shall be submitted to the Office of Air Management (OAM), Permit Administration & Development Section.
- (1) If the Affidavit of Construction verifies that the facilities covered in this Construction Permit were constructed as proposed in the application, then the facilities may begin operating on the date the Affidavit of Construction is postmarked or hand delivered to IDEM.
- (2) If the Affidavit of Construction does not verify that the facilities covered in this Construction Permit were constructed as proposed in the application, then the Permittee shall receive an Operation Permit Validation Letter from the Chief of the Permit Administration & Development Section prior to beginning operation of the facilities.

- (b) If construction is completed in phases; i.e., the entire construction is not done continuously, a separate affidavit must be submitted for each phase of construction. Any permit conditions associated with operation start up dates such as stack testing for New Source Performance Standards (NSPS) shall be applicable to each individual phase.
- (c) Upon receipt of the Operation Permit Validation Letter from the Chief of the Permit Administration & Development Section, the Permittee shall attach it to this document.
- (d) The operation permit will be subject to annual operating permit fees pursuant to 326 IAC 2-7-19 (Fees).
- (e) Pursuant to 326 IAC 2-7-4(a)(1)(A)(ii) and 326 IAC 2-5.1-4, the Permittee shall apply for a Title V operating permit within twelve (12) months of the date on which the source first meets an applicability criterion of 326 IAC 2-7-2.

SECTION C SOURCE OPERATION CONDITIONS

Entire Source

C.1 PSD Minor Source Status [326 IAC 2-2] [40 CFR 52.21]

- (a) The total source potential to emit of any criteria pollutant is less than 250 tons per year. Therefore the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) and 40 CFR 52.21 will not apply.
- (b) Any change or modification which may increase potential to emit to 250 tons per year from this source, shall cause this source to be considered a major source under PSD, 326 IAC 2-2 and 40 CFR 52.21, and shall require approval from IDEM, OAM prior to making the change.

C.2 Preventive Maintenance Plan [326 IAC 1-6-3]

- (a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMP) after issuance of this permit, including the following information on each emissions unit:
 - (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
 - (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions;
 - (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.
- (b) The Permittee shall implement the Preventive Maintenance Plans as necessary to ensure that failure to implement the Preventive Maintenance Plan does not cause or contribute to a violation of any limitation on emissions or potential to emit.
- (c) PMP's shall be submitted to IDEM, OAM, upon request and shall be subject to review and approval by IDEM, OAM. IDEM, OAM, may require the Permittee to revise its Preventive Maintenance Plan whenever lack of proper maintenance causes or contributes to any violation.

C.3 Permit Revision [326 IAC 2-5.1-3(e)(3)] [326 IAC 2-6.1-6]

- (a) The Permittee must comply with the requirements of 326 IAC 2-6.1-6 whenever the Permittee seeks to amend or modify this permit.
- (b) Any application requesting an amendment or modification of this permit shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Management
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

Any such application should be certified by the "authorized individual" as defined by 326 IAC 2-1.1-1.

- (c) The Permittee shall notify the OAM within thirty (30) calendar days of implementing a notice-only change. [326 IAC 2-6.1-6(d)]

C.4 Source Modification [326 IAC 2-7-10.5]

- (a) The Permittee must comply with the requirements of 326 IAC 2-7-10.5 whenever the Permittee seeks to construct new emissions units, modify existing emissions units, or otherwise modify the source.
- (b) Any application requesting an amendment or modification of this permit shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Management
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

Any such application should be certified by the "responsible official" as defined by 326 IAC 2-7-1(34) only if a certification is required by the terms of the applicable rule.

C.5 Inspection and Entry [326 IAC 2-7-6(2)]

Upon presentation of proper identification cards, credentials, and other documents as may be required by law, and subject to the Permittee's right under all applicable laws and regulations to assert that the information collected by the agency is confidential and entitled to be treated as such, the Permittee shall allow IDEM, OAM, U.S. EPA, or an authorized representative to perform the following:

- (a) Enter upon the Permittee's premises where a permitted source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
- (b) Have access to and copy, at reasonable times, any records that must be kept under this title or the conditions of this permit or any operating permit revisions;
- (c) Inspect, at reasonable times, any processes, emissions units (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit or any operating permit revisions;
- (d) Sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and
- (e) Utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.

- (1) The Permittee may assert a claim that, in the opinion of the Permittee, information removed or about to be removed from the source by IDEM, OAM, or an authorized representative, contains information that is confidential under IC 5-14-3-4(a). The claim shall be made in writing before or at the time the information is removed from the source. In the event that a claim of confidentiality is so asserted, neither IDEM, OAM, nor an authorized representative, may disclose the information unless and until IDEM, OAM, makes a determination under 326 IAC 17-1-7 through 326 IAC 17-1-9 that the information is not entitled to confidential treatment and that determination becomes final. [IC 5-14-3-4; IC 13-14-11-3; 326 IAC 17-1-7 through 326 IAC 17-1-9]

C.6 Transfer of Ownership or Operation [326 IAC 2-6.1-6(d)(3)]

Pursuant to [326 IAC 2-6.1-6(d)(3)] :

- (a) In the event that ownership of this source is changed, the Permittee shall notify IDEM, OAM, Permits Branch, within thirty (30) days of the change.
- (b) The written notification shall be sufficient to transfer the permit to the new owner by an notice-only change pursuant to 326 IAC 2-6.1-6(d)(3).
- (c) IDEM, OAM, shall issue a revised permit.
The notification which shall be submitted by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1.

C.7 Permit Revocation [326 IAC 2-1.1-9]

Pursuant to 326 IAC 2-1.1-9(a)(Revocation of Permits), this permit to construct and operate may be revoked for any of the following causes:

- (a) Violation of any conditions of this permit.
- (b) Failure to disclose all the relevant facts, or misrepresentation in obtaining this permit.
- (c) Changes in regulatory requirements that mandate either a temporary or permanent reduction of discharge of contaminants. However, the amendment of appropriate sections of this permit shall not require revocation of this permit.
- (d) Noncompliance with orders issued pursuant to 326 IAC 1-5 (Episode Alert Levels) to reduce emissions during an air pollution episode.
- (e) For any cause which establishes in the judgment of IDEM, the fact that continuance of this permit is not consistent with purposes of this article.

C.8 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings) as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor in a six (6) hour period.

C.9 Fugitive Dust Emissions [326 IAC 6-4]

The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions). 326 IAC 6-4-2(4) is not federally enforceable.

Testing Requirements

C.10 Performance Testing [326 IAC 3-6][326 IAC 2-1.1-11]

- (a) Compliance testing on new emissions units shall be conducted within 60 days after achieving maximum production rate, but no later than 180 days after initial start-up, if specified in Section D of this approval. All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this permit, utilizing any applicable procedures and analysis methods specified in 40 CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63, 40 CFR 75, or other procedures approved by IDEM, OAM.

A test protocol, except as provided elsewhere in this permit, shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

no later than thirty-five (35) days prior to the intended test date. The Permittee shall submit a notice of the actual test date to the above address so that it is received at least two weeks prior to the test date.

- (b) All test reports must be received by IDEM, OAM within forty-five (45) days after the completion of the testing. An extension may be granted by the IDEM, OAM, if the source submits to IDEM, OAM, a reasonable written explanation within five (5) days prior to the end of the initial forty-five (45) day period.

The documentation submitted by the Permittee does not require certification by the "authorized individual" as defined by 326 IAC 2-1.1-1.

Compliance Monitoring Requirements

C.11 Compliance Monitoring [326 IAC 2-1.1-11]

Compliance with applicable requirements shall be documented as required by this permit. The Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment. All monitoring and record keeping requirements not already legally required shall be implemented when operation begins.

C.12 Maintenance of Monitoring Equipment [IC 13-14-1-13]

- (a) In the event that a breakdown of the monitoring equipment occurs, a record shall be made of the times and reasons of the breakdown and efforts made to correct the problem. To the extent practicable, supplemental or intermittent monitoring of the parameter should be implemented at intervals no less frequent than required in Section D of this permit until such time as the monitoring equipment is back in operation. In the case of continuous monitoring, supplemental or intermittent monitoring of the parameter should be implemented at intervals no less than **one (1) hour (this time frame is determined on a case by case basis)** until such time as the continuous monitor is back in operation.
- (b) The Permittee shall install, calibrate, quality assure, maintain, and operate all necessary monitors and related equipment. In addition, prompt corrective action shall be initiated whenever indicated.

C.13 Monitoring Methods [326 IAC 3]

Any monitoring or testing required by Section D of this permit shall be performed according to the provisions of 326 IAC 3, 40 CFR 60, Appendix A, or other approved methods as specified in this permit.

C.14 Compliance Monitoring Plan - Failure to Take Response Steps [326 IAC 1-6]

- (a) The Permittee is required to implement a compliance monitoring plan to ensure that reasonable information is available to evaluate its continuous compliance with applicable requirements. This compliance monitoring plan is comprised of:
 - (1) This condition;
 - (2) The Compliance Determination Requirements in Section D of this permit;
 - (3) The Compliance Monitoring Requirements in Section D of this permit;
 - (4) The Record Keeping and Reporting Requirements in Section C (Monitoring Data Availability, General Record Keeping Requirements, and General Reporting Requirements) and in Section D of this permit; and
 - (5) A Compliance Response Plan (CRP) for each compliance monitoring condition of this permit. CRP's shall be submitted to IDEM, OAM upon request and shall be subject to review and approval by IDEM, OAM. The CRP shall be prepared within ninety (90) days after issuance of this permit by the Permittee and maintained on site, and is comprised of :
 - (A) Response steps that will be implemented in the event that compliance related information indicates that a response step is needed pursuant to the requirements of Section D of this permit; and
 - (B) A time schedule for taking such response steps including a schedule for devising additional response steps for situations that may not have been predicted.

- (b) For each compliance monitoring condition of this permit, appropriate response steps shall be taken when indicated by the provisions of that compliance monitoring condition. Failure to perform the actions detailed in the compliance monitoring conditions or failure to take the response steps within the time prescribed in the Compliance Response Plan, shall constitute a violation of the permit unless taking the response steps set forth in the Compliance Response Plan would be unreasonable.
- (c) After investigating the reason for the excursion, the Permittee is excused from taking further response steps for any of the following reasons:
 - (1) The monitoring equipment malfunctioned, giving a false reading. This shall be an excuse from taking further response steps providing that prompt action was taken to correct the monitoring equipment.
 - (2) The Permittee has determined that the compliance monitoring parameters established in the permit conditions are technically inappropriate, has previously submitted a request for an administrative amendment to the permit, and such request has not been denied or;
 - (3) An automatic measurement was taken when the process was not operating; or
 - (4) The process has already returned to operating within "normal" parameters and no response steps are required.
- (d) Records shall be kept of all instances in which the compliance related information was not met and of all response steps taken.

Record Keeping and Reporting Requirements

C.15 Malfunctions Report [326 IAC 1-6-2]

Pursuant to 326 IAC 1-6-2 (Records; Notice of Malfunction):

- (a) A record of all malfunctions, including startups or shutdowns of any facility or emission control equipment, which result in violations of applicable air pollution control regulations or applicable emission limitations shall be kept and retained for a period of three (3) years and shall be made available to the Indiana Department of Environmental Management (IDEM), Office of Air Management (OAM) or appointed representative upon request.
- (b) When a malfunction of any facility or emission control equipment occurs which lasts more than one (1) hour, said condition shall be reported to OAM, using the Malfunction Report Forms (2 pages). Notification shall be made by telephone or facsimile, as soon as practicable, but in no event later than four (4) daytime business hours after the beginning of said occurrence.
- (c) Failure to report a malfunction of any emission control equipment shall constitute a violation of 326 IAC 1-6, and any other applicable rules. Information of the scope and expected duration of the malfunction shall be provided, including the items specified in 326 IAC 1-6-2(a)(1) through (6).

- (d) Malfunction is defined as any sudden, unavoidable failure of any air pollution control equipment, process, or combustion or process equipment to operate in a normal and usual manner. [326 IAC 1-2-39]

C.16 Annual Emission Statement [326 IAC 2-6]

- (a) The Permittee shall submit an annual emission statement certified pursuant to the requirements of 326 IAC 2-6, that must be received by April 15 of each year and must comply with the minimum requirements specified in 326 IAC 2-6-4. The annual emission statement shall meet the following requirements:
 - (1) Indicate actual emissions of criteria pollutants from the source, in compliance with 326 IAC 2-6 (Emission Reporting);
 - (2) Indicate actual emissions of other regulated pollutants from the source, for purposes of Part 70 fee assessment.
- (b) The annual emission statement covers the twelve (12) consecutive month time period starting December 1 and ending November 30. The annual emission statement must be submitted to:

Indiana Department of Environmental Management
Technical Support and Modeling Section, Office of Air Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015
- (c) The annual emission statement required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAM, on or before the date it is due.

The submittal by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1.

C.17 Monitoring Data Availability [326 IAC 2-6.1-2] [IC 13-14-1-13]

- (a) With the exception of performance tests conducted in accordance with Section C-Performance Testing, all observations, sampling, maintenance procedures, and record keeping, required as a condition of this permit shall be performed at all times the equipment is operating at normal representative conditions.
- (b) As an alternative to the observations, sampling, maintenance procedures, and record keeping of subsection (a) above, when the equipment listed in Section D of this permit is not operating, the Permittee shall either record the fact that the equipment is shut down or perform the observations, sampling, maintenance procedures, and record keeping that would otherwise be required by this permit.
- (c) If the equipment is operating but abnormal conditions prevail, additional observations and sampling should be taken with a record made of the nature of the abnormality.

- (d) If for reasons beyond its control, the operator fails to make required observations, sampling, maintenance procedures, or record keeping, reasons for this must be recorded.
- (e) At its discretion, IDEM may excuse such failure providing adequate justification is documented and such failures do not exceed five percent (5%) of the operating time in any quarter.
- (f) Temporary, unscheduled unavailability of staff qualified to perform the required observations, sampling, maintenance procedures, or record keeping shall be considered a valid reason for failure to perform the requirements stated in (a) above.

C.18 General Record Keeping Requirements [326 IAC 2-6.1-2]

- (a) Records of all required monitoring data and support information shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be kept at the source location for a minimum of three (3) years and available upon the request of an IDEM, OAM, representative. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a written request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.
- (b) Records of required monitoring information shall include, where applicable:
 - (1) The date, place, and time of sampling or measurements;
 - (2) The dates analyses were performed;
 - (3) The company or entity performing the analyses;
 - (4) The analytic techniques or methods used;
 - (5) The results of such analyses; and
 - (6) The operating conditions existing at the time of sampling or measurement.
- (c) Support information shall include, where applicable:
 - (1) Copies of all reports required by this permit;
 - (2) All original strip chart recordings for continuous monitoring instrumentation;
 - (3) All calibration and maintenance records;
 - (4) Records of preventive maintenance shall be sufficient to demonstrate that failure to implement the Preventive Maintenance Plan did not cause or contribute to a violation of any limitation on emissions or potential to emit. To be relied upon subsequent to any such violation, these records may include, but are not limited to: work orders, parts inventories, and operator's standard operating procedures. Records of response steps taken shall indicate whether the response steps were performed in accordance with the Compliance Response Plan required by Section C - Compliance Monitoring Plan - Failure to take Response Steps, of this permit, and whether a deviation from a permit condition was reported. All records shall briefly describe what maintenance and response steps were taken and indicate who performed the tasks.

- (d) All record keeping requirements not already legally required shall be implemented when operation begins.

C.19 General Reporting Requirements [326 IAC 2-1.1-11] [326 IAC 2-6.1-2] [IC 13-14-1-13]

- (a) To affirm that the source has met all the compliance monitoring requirements stated in this permit the source shall submit a Semi-annually Compliance Monitoring Report. Any deviation from the requirements and the date(s) of each deviation must be reported. The Compliance Monitoring Report shall include the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (b) The report required in (a) of this condition and reports required by conditions in Section D of this permit shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

- (c) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAM, on or before the date it is due.

- (d) Unless otherwise specified in this permit, any semi-annual report shall be submitted within thirty (30) days of the end of the reporting period. The report does not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (e) All instances of deviations must be clearly identified in such reports. A reportable deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit or a rule. It does not include:

- (1) An excursion from compliance monitoring parameters as identified in Section D of this permit unless tied to an applicable rule or limit; or
- (2) A malfunction as described in 326 IAC 1-6-2; or
- (3) Failure to implement elements of the Preventive Maintenance Plan unless lack of maintenance has caused or contributed to a deviation.
- (4) Failure to make or record information required by the compliance monitoring provisions of Section D unless such failure exceeds 5% of the required data in any calendar quarter.

A Permittee's failure to take the appropriate response step when an excursion of a compliance monitoring parameter has occurred or failure to monitor or record the required compliance monitoring is a deviation.

- (f) Any corrective actions or response steps taken as a result of each deviation must be clearly identified in such reports.
- (g) The first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period.

C.20 Annual Notification [326 IAC 2-6.1-5(a)(5)]

- (a) Annual notification shall be submitted to the Office of Air Management stating whether or not the source is in operation and in compliance with the terms and conditions contained in this permit.
- (b) Noncompliance with any condition must be specifically identified. If there are any permit conditions or requirements for which the source is not in compliance at any time during the year, the Permittee must provide a narrative description of how the source did or will achieve compliance and the date compliance was, or will be, achieved. The notification must be signed by an authorized individual.
- (c) The annual notice shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted in the format attached no later than March 1 of each year to:
- Compliance Data Section, Office of Air Management
Indiana Department of Environmental Management
100 North Senate Avenue, P.O. Box 6015
Indianapolis, IN 46206-6015
- (d) The notification shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAM, on or before the date it is due.

SECTION D.1

EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description

- (a) Two (2) natural gas fired make up air unit, identified as MAU-1 and MAU-2, each with a maximum heat input capacity of 6.875 million (MM) British thermal units (Btu) per hour;
- (b) Welding operation; one (1) steel MIG welding station, with a maximum wire consumption rate of 0.33 pounds of wire per hour (lb wire/hr), four (4) aluminum MIG welding stations, each with a maximum wire consumption rate of 0.50 lb wire/hr, two (2) oxyacetylene flame cutters, each with a maximum cutting rate of 28 inches per minute, and one (1) plasma cutter, with a maximum cutting rate of 155 inches per minute;
- (c) Woodworking operation with a maximum throughput of 1085 pounds of wood per hour, which consists of various woodworking equipment;
- (d) Two (2) paint booths, identified as PB1 and PB2, using HVLP spray guns, using dry filters for overspray control, and exhausting to stacks S1, S2, S3 and S4; and
- (e) One (1) general assembly operation, exhausting to general ventilation.

(The information describing the process contained in this emissions unit description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards

D.1.1 Hazardous Air Pollutants (New Source Toxics Control) [326 IAC 2-4.1-1]

Pursuant to 326 IAC 2-4.1-1 (New Source Toxics Control), the Maximum Achievable Control Technology (MACT) for the two (2) paint booths (PB1 and PB2) is described below. Adherence with the MACT conditions will also satisfy 326 IAC 8-1-6 (BACT).

Cleaning and Prepping motor homes exteriors prior to painting, primer applications, and base coat applications:

Motor home and camper exteriors will be hand-wiped with a cleaning solvent prior to the application of the first surface coating system. Cleaning solvents will contain 6.5 lbs/voc/hap per gallon lacquer thinners and prep cleaners.

Primer will be applied using HVLP (high volume-low pressure) or equivalent spray equipment for better transfer efficiency.

Base Coat / Clear coat Application:

Base coat and clear coats will be applied using HVLP (high volume low pressure) or equivalent spray equipment. The base coat / clear coat system will be used on motor homes and campers at this facility. Because mixing supplier coatings creates blistering, chipping, peeling and delamination problems the base coats applied will have a maximum VOC/HAP content of 6.2 lbs voc/hap per gallon applied and the clear coats applied will have a maximum VOC/HAP content of 4.4 lbs voc/hap per gallon applied. Compliance demonstration will be based on required parts in formula mixes.

Chassis Painting

Chassis paints will utilize low VOC/HAP coatings and high transfer efficiency spray equipment. The equipment used could be airless air-assisted or HVLP or equivalent.

Undercoating

Vehicles will be undercoated with a low VOC/HAP undercoat or with a waterborne undercoat. Airless spray equipment or its equivalent will be used for transfer efficiency.

Side wall lamination, head liners

Adhesives utilized in the side wall lamination and head liner area will be applied with high volume low pressure (HVLP) spray systems or airless air-assisted systems. The use of Hot melt adhesives systems will be utilized in areas that do not need high force clamping or that are not contoured in such a way to prohibit proper adhesion.

The following BACT "No Control Option" control measures will also be followed:

Use of Base coat colors 6.2 lb/voc per gallon and Clear coat systems 4.4 lbs/voc per gallon
Use of 1.8 lbs/voc per gallon to zero VOC undercoating systems
Use of Hot melt adhesives and aerosol adhesives where possible
Use of HVLP or equivalent spray equipment in the painting operations
Use of Air-assisted airless or airless or equivalent spray equipment in adhesive applications
Use of Good Housekeeping Practices : Sealed lids on containers not in use or in storage
 Gun and line purging into approved containers
 Organized spill response and cleanup
 Routine maintenance of spray equipment to prevent drips
 leaks, and spills

D.1.2 Particulate Matter (PM) [326 IAC 6-3-2]

(a) Pursuant to 326 IAC 6-3-2(c), the allowable particulate matter emissions rate from the welding operation not already regulated by 326 IAC 6-1 or any New Source Performance Standard, and which has a maximum process weight rate less than 100 pounds per hour shall not exceed 0.551 pounds per hour.

(b) Pursuant to 326 IAC 6-3-2(c), the allowable particulate matter emissions rate from the woodworking operation not already regulated by 326 IAC 6-1 or any New Source Performance Standard, and which has a maximum process weight rate less than 100 pounds per hour shall not exceed 0.551 pounds per hour.

(c) Pursuant to 326 IAC 6-3-2 (Process Operations), particulate matter (PM) from the two (2) paint booths, identified as PB1 and PB2, shall be limited by the following:

Interpolation and extrapolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour and} \\ P = \text{process weight rate in tons per hour}$$

The dry filters shall be in operation at all times the paint booth (PB-1) is in operation, in order to comply with this limit.

D.1.3 Preventive Maintenance Plan [326 IAC 1-6-3]

A Preventive Maintenance Plan, in accordance with Section C - Preventive Maintenance Plan, of this permit, is required for the emissions units and their control devices.

Compliance Determination Requirements

D.1.4 Testing Requirements [326 IAC 2-1.1-11]

The Permittee is not required to test this emissions unit by this permit. However, IDEM may require compliance testing when necessary to determine if the emissions unit is in compliance. If testing is required by IDEM, compliance with the PM limit specified in Condition D.1.4 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

D.1.5 Volatile Organic Compounds (VOC)

Compliance with the VOC content and usage limitations contained in Conditions D.1.1 shall be determined pursuant to 326 IAC 8-1-4(a)(3) and 326 IAC 8-1-2(a) using formulation data supplied by the coating manufacturer. IDEM, OAM, reserves the authority to determine compliance using Method 24 in conjunction with the analytical procedures specified in 326 IAC 8-1-4.

Compliance Monitoring Requirements [326 IAC 2-5.1-3(e)(2)] [326 IAC 2-6.1-5(a)(2)]

D.1.6 Particulate Matter (PM)

The dry filters for PM control shall be in operation at all times when the two (2) paint booths (PB1 and PB2) are in operation.

D.1.7 Monitoring

- (a) Daily inspections shall be performed to verify the placement, integrity and particle loading of the filters. To monitor the performance of the dry filters, weekly observations shall be made of the overspray from the paint booths (PB1 and PB2) stacks (S1, S2, S3 and S4) while the booth is in operation. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.
- (b) Monthly inspections shall be performed of the coating emissions from the stacks and the presence of overspray on the rooftops and the nearby ground. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when a noticeable change in overspray emission, or evidence of overspray emission is observed. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.
- (c) Additional inspections and preventive measures shall be performed as prescribed in the Preventive Maintenance Plan.

Record Keeping and Reporting Requirements [326 IAC 2-5.1-3(e)(2)] [326 IAC 2-6.1-5(a)(2)]

D.1.8 Record Keeping Requirements

- (a) To document compliance with Conditions D.1.1, the Permittee shall maintain records in accordance with (1) through (4) below. Records maintained for (1) through (4) shall be taken monthly and shall be complete and sufficient to establish compliance with the VOC usage limits and/or the VOC emission limits established in Condition D.1.1.
 - (1) The amount and VOC content of each coating material and solvent used. Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used. Solvent usage records shall differentiate between those added to coatings and those used as cleanup solvents;
 - (2) A log of the dates of use;
 - (3) The cleanup solvent usage for each month;
 - (4) The total VOC usage for each month; and

- (b) To document compliance with Condition D.1.7, the Permittee shall maintain a log of weekly overspray observations, daily and monthly inspections, and those additional inspections prescribed by the Preventive Maintenance Plan.
- (c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR MANAGEMENT
COMPLIANCE DATA SECTION**

**CONSTRUCTION AND OPERATING PERMIT
ANNUAL NOTIFICATION**

This form should be used to comply with the notification requirements under 326 IAC 2-6.1-5(a)(5).

Company Name:	Dynamax Corporation
Address:	53103 Northland Drive, Elkhart, Indiana 46514
City:	Elkhart
Phone #:	(219) 262-3474
CP #:	039-12002-00536

I hereby certify that Dynamax Corporation is ☒ still in operation.
☐ no longer in operation.

I hereby certify that Dynamax Corporation is ☒ in compliance with the requirements of CP 039-12002-00536.
☐ not in compliance with the requirements of CP 039-12002-00536.

Authorized Individual (typed):
Title:
Signature:
Date:

If there are any conditions or requirements for which the source is not in compliance, provide a narrative description of how the source did or will achieve compliance and the date compliance was, or will be achieved.

Noncompliance:

MALFUNCTION REPORT

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR MANAGEMENT
FAX NUMBER - 317 233-5967**

**This form should only be used to report malfunctions applicable to Rule 326 IAC 1-6
and to qualify for the exemption under 326 IAC 1-6-4.**

THIS FACILITY MEETS THE APPLICABILITY REQUIREMENTS BECAUSE IT HAS POTENTIAL TO EMIT 25 TONS/YEAR PARTICULATE MATTER ?____, 25 TONS/YEAR SULFUR DIOXIDE ?____, 25 TONS/YEAR NITROGEN OXIDES?____, 25 TONS/YEAR VOC ?____, 25 TONS/YEAR HYDROGEN SULFIDE ?____, 25 TONS/YEAR TOTAL REDUCED SULFUR ?____, 25 TONS/YEAR REDUCED SULFUR COMPOUNDS ?____, 25 TONS/YEAR FLUORIDES ?____, 100TONS/YEAR CARBON MONOXIDE ?____, 10 TONS/YEAR ANY SINGLE HAZARDOUS AIR POLLUTANT ?____, 25 TONS/YEAR ANY COMBINATION HAZARDOUS AIR POLLUTANT ?____, 1 TON/YEAR LEAD OR LEAD COMPOUNDS MEASURED AS ELEMENTAL LEAD ?____, OR IS A SOURCE LISTED UNDER 326 IAC 2-5.1-3(2) ?____. EMISSIONS FROM MALFUNCTIONING CONTROL EQUIPMENT OR PROCESS EQUIPMENT CAUSED EMISSIONS IN EXCESS OF APPLICABLE LIMITATION _____.

THIS MALFUNCTION RESULTED IN A VIOLATION OF: 326 IAC _____R, PERMIT CONDITION # _____ AND/OR PERMIT LIMIT OF _____

THIS INCIDENT MEETS THE DEFINITION OF 'MALFUNCTION' AS LISTED ON REVERSE SIDE ? Y N

THIS MALFUNCTION IS OR WILL BE LONGER THAN THE ONE (1) HOUR REPORTING REQUIREMENT ? Y N

COMPANY: _____ PHONE NO. () _____
LOCATION: (CITY AND COUNTY) _____
PERMIT NO. _____ AFS PLANT ID: _____ AFS POINT ID: _____ INSP: _____
CONTROL/PROCESS DEVICE WHICH MALFUNCTIONED AND REASON: _____

DATE/TIME MALFUNCTION STARTED: ____/____/20____ _____ AM / PM

ESTIMATED HOURS OF OPERATION WITH MALFUNCTION CONDITION: _____

DATE/TIME CONTROL EQUIPMENT BACK-IN SERVICE ____/____/20____ _____ AM/PM

TYPE OF POLLUTANTS EMITTED: TSP, PM-10, SO₂, VOC, OTHER: _____

ESTIMATED AMOUNT OF POLLUTANT EMITTED DURING MALFUNCTION: _____

MEASURES TAKEN TO MINIMIZE EMISSIONS: _____

REASONS WHY FACILITY CANNOT BE SHUTDOWN DURING REPAIRS: _____

CONTINUED OPERATION REQUIRED TO PROVIDE ESSENTIAL* SERVICES: _____

CONTINUED OPERATION NECESSARY TO PREVENT INJURY TO PERSONS: _____

CONTINUED OPERATION NECESSARY TO PREVENT SEVERE DAMAGE TO EQUIPMENT: _____

INTERIM CONTROL MEASURES: (IF APPLICABLE) _____

MALFUNCTION REPORTED BY: _____ TITLE: _____
(SIGNATURE IF FAXED)

MALFUNCTION RECORDED BY: _____ DATE: _____ TIME: _____

*SEE PAGE 2

**Please note - This form should only be used to report malfunctions
applicable to Rule 326 IAC 1-6 and to qualify for
the exemption under 326 IAC 1-6-4.**

326 IAC 1-6-1 Applicability of rule

Sec. 1. This rule applies to the owner or operator of any facility required to obtain a permit under 326 IAC 2-5.1 or 326 IAC 2-6.1.

326 IAC 1-2-39 "Malfunction" definition

Sec. 39. Any sudden, unavoidable failure of any air pollution control equipment, process, or combustion or process equipment to operate in a normal and usual manner.

***Essential services** are interpreted to mean those operations, such as, the providing of electricity by power plants. Continued operation solely for the economic benefit of the owner or operator shall not be sufficient reason why a facility cannot be shutdown during a control equipment shutdown.

If this item is checked on the front, please explain rationale:

Indiana Department of Environmental Management Office of Air Management

Addendum to the Technical Support Document for a New Source Construction Permit

Source Name: Dynamax Corporation
Source Location: 53103 Northland Drive, Elkhart, Indiana 46515
SIC Code: 3716
County: Elkhart
Operation Permit No.: CP-039-12002-00536
Permit Reviewer: Nishat Hydari/EVP

On May 20, 2000, the Office of Air Management (OAM) had a notice published in the Elkhart Truth, Elkhart, Indiana, stating that Dynamax Corporation had applied for a New Source Construction Permit to operate a motor home production plant. The notice also stated that OAM proposed to issue a construction permit for this operation and provided information on how the public could review the proposed construction permit and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this construction permit should be issued as proposed.

On June 14, 2000, Shelly R. Harshberger, Director of Properties at Dynamax Corporation submitted comments. The summary of the comments and corresponding responses is as follows (bolded language has been added, the language with a line through it has been deleted):

Comment # 1

Section A.1 General Information

Please change the source address zip code to 46514 and phone number to 219-262-3474.

Response # 1

The following changes have been made to Section A.1.

A.1 General Information [326 IAC 2-5.1-3(c)] [326 IAC 2-6.1-4(a)]

The Permittee owns and operates a stationary motor home production plant.

Authorized Individual: DeWayne Creighton Jr.
 Source Address: 53103 Northland Drive, Elkhart, Indiana ~~46515~~ **46514**
 Mailing Address: P.O. Box 1647, Elkhart, Indiana 46515
 Phone Number: (219) 262-~~2212~~ **3474**
 SIC Code: 3716
 County Location: Elkhart
 County Status: Attainment for all criteria pollutants
 Source Status: Part 70 Permit Program
 Minor Source, under PSD or Emission Offset Rules;
 Major Source, Section 112 of the Clean Air Act

Comment # 2

Section A.2 Emission Units and Pollution Control Equipment Summary

Please reflect the following changes:

- (a) Please change to: Two (2) natural gas fired make-up air units, identified as MAU-1 and MAU-2, with a maximum heat input capacity of 6.875 million BTU per hour each
- (b) Please delete the ten infrared heaters. These heaters are no longer going to be put in the building.
- (e) Each paint booth has two (2) exhaust stacks as indicated in the permit application. Please change ...exhausting to stacks S1, S2, S3, and S4.

In addition, there should be a reference to the emissions from the general assembly operation as described in the permit application. As identified in W1 and the attachment to the AC-1 of the permit application, there will be emissions from caulks, adhesives, solvents, etc. from the assembly process which would not be within a paint booth. I request these emissions be identified as "General assembly processes through general ventilation."

Response # 2

The emissions from the two (2) natural gas fired make-up air units were re-calculated based on the revised heat input and the revised calculation sheet (Page 3 of 5 of TSD Addendum App A) is attached.

The following changes have been made to Section A.2.

A.2 Emissions units and Pollution Control Equipment Summary

This stationary source is approved to construct and operate the following emissions units and pollution control devices:

- (a) ~~One (1)~~ **Two (2)** natural gas fired make up air unit, identified as MAU-1 **and MAU-2, each** with a maximum heat input capacity of ~~3.4~~ **6.875** million (MM) British thermal units (Btu) per hour;
- (b) ~~Ten (10) natural gas fired infrared heaters, identified as IR 1 through IR 10, each with a maximum heat input capacity of 0.2 MMBtu per hour;~~
- (eb) Welding operation; one (1) steel MIG welding station, with a maximum wire consumption rate of 0.33 pounds of wire per hour (lb wire/hr), four (4) aluminum MIG welding stations, each with a maximum wire consumption rate of 0.50 lb wire/hr, two (2) oxyacetylene flame cutters, each with a maximum cutting rate of 28 inches per minute, and one (1) plasma cutter, with a maximum cutting rate of 155 inches per minute;
- (ec) Woodworking operation with a maximum throughput of 1085 pounds of wood per hour, which consists of various woodworking equipment; ~~and~~
- (ed) Two (2) paint booths, identified as PB1 and PB2, using HVLP spray guns, using dry filters for overspray control, and exhausting to stacks S1, ~~and S2, S3 and S4;~~ **and**
- (e) **One (1) general assembly operation, exhausting to general ventilation.**

Comment # 3

Section C.2 Preventative Maintenance Plan

Please remove this section from the permit. This requirement should only be required in a Part 70 / Title V permit. In addition, rather than requiring the PMP to be implemented at issuance of the Part 70 / Title V permit, a source should be allowed 90 days to implement the PMPs.

Response # 3

Pursuant to 326 IAC 1-6-3, any person responsible for operating any facility specified in 326 IAC 1-6-1; which includes all sources required to obtain a state permit, shall prepare and maintain a PMP. The requirement is not only limited to a Title V permit. Therefore, there have been no changes due to this comment.

Comment # 4

Section C.5 Inspection and Entry

C.5(e) It is unreasonable to impose a blanket authorization of the use of photographic or recording equipment when not so authorized under any regulatory provision. We request this item be deleted from the permit.

Response # 4

Photographs are routinely taken to document conditions during an inspection, and are therefore included. The use of cameras or other recording, testing, or monitoring equipment for the purpose of assuring compliance with this permit, if necessary, is a reasonable extension of this documentation.

To preserve the right of the source in maintaining confidentially on proprietary information the following changes have been made to Section C.5(e) as a result of this comment.

C.5 Inspection and Entry [326 IAC 2-7-6(2)]

- (e) Utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.
 - (1) **The Permittee may assert a claim that, in the opinion of the Permittee, information removed or about to be removed from the source by IDEM, OAM, or an authorized representative, contains information that is confidential under IC 5-14-3-4(a). The claim shall be made in writing before or at the time the information is removed from the source. In the event that a claim of confidentiality is so asserted, neither IDEM, OAM, nor an authorized representative, may disclose the information unless and until IDEM, OAM, makes a determination under 326 IAC 17-1-7 through 326 IAC 17-1-9 that the information is not entitled to confidential treatment and that determination becomes final. [IC 5-14-3-4; IC 13-14-11-3; 326 IAC 17-1-7 through 326 IAC 17-1-9]**

Comment # 5

Section C.7 Permit Revocation

C.7(c) We request this item be removed from the permit. This would conflict with the compliance schedule which would result from any new regulations.

Response # 5

Pursuant to 326 IAC 2-1.1-9, the commissioner has the authority of revoking issued permits for proper causes as stated in Condition C.7. The condition cannot be removed from the permit but it will be updated to reflect the correct rule citation.

C.7 Permit Revocation [326 IAC 2-1.1-9]

Pursuant to 326 IAC 2-1.1-9(a)(Revocation of Permits), this permit to construct and operate may be revoked for any of the following causes:

Comment # 6

C.11 Compliance Monitoring

This is not applicable to this source. We request this be removed.

Response # 6

Section C.11 Compliance Monitoring cannot be removed from the permit because this source has applicable compliance monitoring requirements for the two paint booths (PB1 and PB2). These monitoring requirements are listed under Section D.1.7. No changes have been made to the permit as a result of this comment.

Comment # 7

Section C.12 Maintenance of Monitoring Equipment

This is not applicable to this source. We request this be removed.

Response # 7

Section C.12 Maintenance of Monitoring Equipment cannot be removed from the permit because it refers to the maintenance of the monitoring equipment for performing compliance monitoring as required by conditions in Section D. No changes have been made to the permit as a result of this comment.

Comment # 8

Section C.14 Compliance Monitoring Plan

Please remove this section from the permit. This requirement should only be required in a Part 70 / Title V permit.

Response # 8

The Compliance Monitoring Plan is required to be included in the permit whenever there is a compliance monitoring requirement in Section D. Since the permit has compliance monitoring requirements (conditions D.1.6 and D.1.7) this section cannot be removed. No changes have been made to the permit as a result of this comment.

Comment # 9

Section C.16 Annual Emissions Statement

We request the deadline of "April 15" be deleted and substituted with "the applicable due date." There have been suggestions of amending rule 326 IAC 2-6 to remove the April 15th due date for areas redesignated to attainment for ozone. We also request the annual emission statement coverage dates be deleted and replaced with language referencing the applicable rule citation.

Response # 9

Rule 326 IAC 2-6 has not been amended. IDEM, OAM cannot change the deadline of submitting the Annual Emission Statement based on rumors that 326 IAC 2-6 might be amended. The rule citation related to the coverage dates is 326 IAC 2-6-2(8). It will be noted here in the Addendum. The condition already contains the rule cite of 2-6. No changes have been made to the permit as a result of this comment.

Comment # 10

Section C.18 General Record Keeping Requirements

The permit requires records be maintained at the location for three (3) years of the required five (5) years total. Please allow these records to be kept at an off-site location as long as available within one (1) hour upon request.

Response # 10

The reason for requiring records to be kept on site for three (3) of the required five (5) years is so that the records would be readily available to show compliance with the permit conditions when the inspector arrives at the source. Also, there is no undue hardship to the source to maintain three years worth of data on site. No changes have been made to the permit as a result of this comment.

Comment # 11

Section C.19 General Reporting Requirements

We request semi-annual reporting requirement rather than the quarterly compliance monitoring reporting requirement since there is no other quarterly reporting requirement in the permit.

Response # 11

The general reporting requirements of Condition C.19 includes the reporting of compliance with all required conditions of the Section D. Since there are no quarterly reporting requirements for the source, OAM has decided to change the reporting requirement in Condition C.19 from quarterly to semi-annually.

C.19 General Reporting Requirements [326 IAC 2-1.1-11] [326 IAC 2-6.1-5] [IC 13-14-1-13]

- (a) To affirm that the source has met all the compliance monitoring requirements stated in this permit the source shall submit a ~~Quarterly~~ **Semi-annually** Compliance Monitoring Report. Any deviation from the requirements and the date(s) of each deviation must be reported. The Compliance Monitoring Report shall include the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (b) The report required in (a) of this condition and reports required by conditions in Section D of this permit shall be submitted to:
- Indiana Department of Environmental Management
Compliance Data Section, Office of Air Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015
- (c) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAM, on or before the date it is due.
- (d) Unless otherwise specified in this permit, any ~~quarterly~~ **semi-annually** report shall be submitted within thirty (30) days of the end of the reporting period. The report does not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (e) All instances of deviations must be clearly identified in such reports. A reportable deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit or a rule. It does not include:
- (1) An excursion from compliance monitoring parameters as identified in Section D of this permit unless tied to an applicable rule or limit; or
 - (2) A malfunction as described in 326 IAC 1-6-2; or
 - (3) Failure to implement elements of the Preventive Maintenance Plan unless lack of maintenance has caused or contributed to a deviation.
 - (4) Failure to make or record information required by the compliance monitoring provisions of Section D unless such failure exceeds 5% of the required data in any calendar quarter.
- A Permittee's failure to take the appropriate response step when an excursion of a compliance monitoring parameter has occurred or failure to monitor or record the required compliance monitoring is a deviation.
- (f) Any corrective actions or response steps taken as a result of each deviation must be clearly identified in such reports.

- (g) The first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period.

Comment # 12

Section C.20 Annual Notification

The Quarterly Compliance Monitoring Reports and the Annual Notification requirements seem redundant and burdensome. These reports should be combined into one reporting requirement. In addition, we request there be some consistency in the reporting due dates. The annual notification due date should be consistent with the annual emissions statement due date.

Response # 12

The semi-annual compliance monitoring report is used to report whether the source is meeting all the requirements in Section D, while the Annual Notification is used to report whether the source is in compliance with the terms and conditions contained in this permit. They are dealing with different requirements in the permit. In order for IDEM to verify the source is in compliance and still operating, an annual notification must be submitted by Dynamax Corporation.

The annual notification due date is identical for all sources in Indiana and is established as required by 326 IAC 2-6. These dates cannot be changed. No changes have been made to the permit as a result of this comment.

Comment # 13

Section D.1 Emission Unit Description

Please make the changes as requested earlier in Section A.2 Emission Units and Pollution Control Equipment Summary.

Response # 13

Emission Unit Description for Section D.1 has been revised as follows:

SECTION D.1

EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description

- (a) ~~One (1)~~ **Two (2)** natural gas fired make up air unit, identified as MAU-1 **and MAU-2, each** with a maximum heat input capacity of ~~3.4~~ **6.875** million (MM) British thermal units (Btu) per hour;
- (b) ~~Ten (10) natural gas fired infrared heaters, identified as IR 1 through IR 10, each with a maximum heat input capacity of 0.2 MMBtu per hour;~~
- (eb) Welding operation; one (1) steel MIG welding station, with a maximum wire consumption rate of 0.33 pounds of wire per hour (lb wire/hr), four (4) aluminum MIG welding stations, each with a maximum wire consumption rate of 0.50 lb wire/hr, two (2) oxyacetylene flame cutters, each with a maximum cutting rate of 28 inches per minute, and one (1) plasma cutter, with a maximum cutting rate of 155 inches per minute;
- (ec) Woodworking operation with a maximum throughput of 1085 pounds of wood per hour, which consists of various woodworking equipment; ~~and~~
- (ed) Two (2) paint booths, identified as PB1 and PB2, using HVLP spray guns, using dry filters for overspray control, and exhausting to stacks S1, ~~and S2, S3 and S4-;~~ **and**
- (e) **One (1) general assembly operation, exhausting to general ventilation.**

(The information describing the process contained in this emissions unit description box is descriptive information and does not constitute enforceable conditions.)

Comment # 14

Section D.1.1 Emission Limitations and Standards

There should be a reference to the emissions from the general assembly operation as described in the permit application. In addition, please change the following typographical errors:

- The use of Hot melt adhesives systems will be utilized in areas that do not need high force clamplng Should be "clamping."
- \$ Use of Hot melt adhesives and aerosol adhesives were possible".....should be "where possible."

Response # 14

The general assembly operation has been added to the Section D.1 equipment description and the following changes have been made to Section D.1.1.

Side wall lamination, head liners

Adhesives utilized in the side wall lamination and head liner area will be applied with high volume low pressure (HVLP) spray systems or airless air-assisted systems. The use of Hot melt adhesives systems will be utilized in areas that do not need high force ~~clamping~~ **clamping** or that are not contoured in such a way to prohibit proper adhesion.

The following BACT "No Control Option" control measures will also be followed:

Use of Base coat colors 6.2 lb/voc per gallon and Clear coat systems 4.4 lbs/voc per gallon
Use of 1.8 lbs/voc per gallon to zero VOC undercoating systems
Use of Hot melt adhesives and aerosol adhesives ~~were~~ **where** possible
Use of HVLP or equivalent spray equipment in the painting operations
Use of Air-assisted airless or airless or equivalent spray equipment in adhesive applications

Use of Good Housekeeping Practices : Sealed lids on containers not in use or in storage
 Gun and line purging into approved containers
 Organized spill response and cleanup
 Routine maintenance of spray equipment to prevent drips
 leaks, and spills

Comment # 15

Section D.1.2 Particulate Matter

Rule 326 IAC 6-3-2 is not intended to apply to sources with process weight rates below 100 pounds per hour and therefore should not be applicable to the welding, woodworking and painting operations.

Response # 15

There is no emission level for applicability to 326 IAC 6-3-2, this rule applies to any process that has the potential to emit Particulate Matter (PM). Therefore, the welding, woodworking and painting operations are subject to the requirements of 326 IAC 6-3-2 even if their respective process weight rates are below 100 pounds per hour. There will be no changes to this condition in the final permit due to this comment.

Comment # 16

Section D.1.7 Monitoring

We request the references to daily and weekly inspections be removed because it proceeds from the unsupported assumption that dry filters are necessary to maintain compliance with Rule 6-3 with regard to overspray. Even if filters were necessary, the regulations require monitoring to be any form of collecting data on a routine basis to determine or otherwise assess compliance with emission limitations or standards. Daily and weekly inspections requirements are unnecessary, unreasonable and over burdensome.

In addition, the monthly inspections of the presence of overspray on the rooftops require a physical inspection on top of a roof with 24 foot eaves. This presents a safety hazard which is unreasonable to ask of a company. We request this item be changed to require only the inspections of the presence of overspray on the ground.

Please note, there are two (2) stacks per booth.

Response # 16

Complying with the requirements of 326 IAC 6-3-2 can be variable especially for paint booths. The actual substrate being painted and the solids content of the paint being used can affect the process weight rate, the gallons or pounds of solid used, transfer efficiency, or other factors that directly affect actual, allowable, or potential emissions. While permit applications contain representative information regarding these factors, relying on this information as an ongoing demonstration of compliance is difficult if the factors are not themselves enforceable. The OAM does not believe that it would be generally advisable to include these factors as permit conditions, to make them enforceable or to presume that they are so fixed they define a source's potential emissions because either could severely limit a source's operational flexibility. Properly operating the air pollution controls that are already in place is generally adequate to demonstrate compliance with 326 IAC 6-3 in lieu of a stack test and also assures compliance with applicable rules limiting fugitive dust, opacity, and (when necessary) Potential to Emit. The OAM believes that checking the placement and integrity of the filters once a day is a very effective means of ensuring proper operation and ongoing compliance. No changes have been made to the permit as a result of this comment.

The following changes have been made to Section D.1.7 to include the two (2) stacks per booth.

D.1.7 Monitoring

- (a) Daily inspections shall be performed to verify the placement, integrity and particle loading of the filters. To monitor the performance of the dry filters, weekly observations shall be made of the overspray from the paint booths (PB1 and PB2) stacks (S1, ~~and S2, S3 and S4~~) while the booth is in operation. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.

Comment # 17

Section D.1.8 Record Keeping Requirements

- (a) Daily cleaning solvent usage tracking, daily total VOC usage tracking, differentiating between solvents added to coatings and those used for clean up, and a log of the dates of use requirements are unnecessary and over burdensome. The source will only be using coatings compliant with the permit requirements and will not be averaging coatings to meet the requirements. The source will maintain MSDS records to prove compliance with the coating limits. We request the daily tracking requirements be removed or revised to only be required if daily averaging would be used.

The source will only be using coatings compliant with the permit requirements and will not be averaging coatings to meet the requirements. Compliance with the coating limits established by the MACT/BACT can be verified through MSDS records. Therefore, there is no reason to track VOC content in the paint products and not VOC emissions on a daily basis.

- (b) We request this requirement be changed to correspond to the requested changes in D.1.7.

Response # 17

The source is required to limit the VOC contents of cleaning solvents and coating as applied, as described in Condition D.1.1. OAM determines that it is necessary to keep the records as described in Section D.1.8 for the source to show compliance with D.1.1. It is sufficient to keep records monthly instead of daily. The following changes have been made to Section D.1.8 as a result of this comment.

D.1.8 Record Keeping Requirements

- (a) To document compliance with Conditions D.1.1, the Permittee shall maintain records in accordance with (1) through (4) below. Records maintained for (1) through (4) shall be taken ~~daily~~ **monthly** and shall be complete and sufficient to establish compliance with the VOC usage limits and/or the VOC emission limits established in Condition D.1.1.
- (1) The amount and VOC content of each coating material and solvent used. Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used. Solvent usage records shall differentiate between those added to coatings and those used as cleanup solvents;
- (2) A log of the dates of use;

- (3) The cleanup solvent usage for each ~~day~~ **month**;
- (4) The total VOC usage for each ~~day~~ **month**; and
- (b) To document compliance with Condition D.1.7, the Permittee shall maintain a log of weekly overspray observations, daily and monthly inspections, and those additional inspections prescribed by the Preventive Maintenance Plan.
- (c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

Comment # 18

Annual Notification Form

Please change the zip code in the address to 46514 and the phone number to 219-262-3474.

Response # 18

The following changes have been made to the Annual Notification Form.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR MANAGEMENT
COMPLIANCE DATA SECTION**

**CONSTRUCTION AND OPERATING PERMIT
ANNUAL NOTIFICATION**

This form should be used to comply with the notification requirements under 326 IAC 2-6.1-5(a)(5).

Company Name:	Dynamax Corporation
Address:	53103 Northland Drive, Elkhart, Indiana 46515 46514
City:	Elkhart
Phone #:	(219) 262-2212 3474
CP #:	039-12002-00536

I hereby certify that Dynamax Corporation is **9** still in operation.
 9 no longer in operation.

I hereby certify that Dynamax Corporation is
 9 in compliance with the requirements of CP 039-12002-00536.
 9 not in compliance with the requirements of CP 039-12002-00536.

Authorized Individual (typed):
Title:
Signature:
Date:

If there are any conditions or requirements for which the source is not in compliance, provide a narrative description of how the source did or will achieve compliance and the date compliance was, or will be achieved.

Noncompliance:

Comment # 19

Affidavit of Construction

Please change the zip code in the address to 46514.

Response # 19

The zip code has been changed in the Affidavit of Construction. The updated Affidavit of Construction is attached.

Comment # 20

Please change the permit to clarify that the permit is not exclusively for the production of motor homes, but also campers, vans, etc. This would be better described as "vehicles."

Response # 20

The following change has been made to Section A.1 of the permit.

A.1 General Information [326 IAC 2-5.1-3(c)] [326 IAC 2-6.1-4(a)]

The Permittee owns and operates a stationary ~~motor home~~ **vehicle** production plant **which includes motor homes, campers, vans, etc.**

Comment # 21

Technical Support Document

Page 2 of 10 TSD - Stack Summary

Please change GV1 information as follows:

GV1 Welding 20' high 2.5' diameter 7500 cfm ambient

Response # 21

The following revisions have been made to the Technical Support Document under the Stack Summary section (**bolded** language has been added, the language with a ~~line~~ through it has been deleted). The OAM prefers that the Technical Support Document reflect the permit that was on public notice. Changes to the permit or technical support material that occur after the public notice are documented in this Addendum to the Technical Support Document. This accomplishes the desired result of ensuring that these types of concerns are documented and part of the record regarding this permit decision.

Stack Summary

Stack ID	Operation	Height (feet)	Diameter (feet)	Flow Rate (acfm)	Temperature (°F)
S1 and S2	Paint booth 1 w/ HVLPs	32	4	30,750 each	ambient
S3 and S4	Paint booth 2 w/ HVLPs	32	4	30,750 each	ambient
GV-1	Foam insulation Welding	0-5 20	4-5 2.5	3,000 7,500	ambient
GV2-6	General assembly	20*	4.5	40,000 each	ambient
GV 7 and 8	Welding	20*	2.5	7,500 each	ambient
GV 9 and 10	Paint Mix & Storage	10*	21" square	1,000 each	ambient
GV 11	Water test room	16*	1.33	2,000	ambient
GV 12 and 13	CO exhaust	16	1.17	800 each	ambient

The following revisions have been made to the Technical Support Document under the appropriate sections (**bolded** language has been added, the language with a line through it has been deleted). The OAM prefers that the Technical Support Document reflect the permit that was on public notice. Changes to the permit or technical support material that occur after the public notice are documented in this Addendum to the Technical Support Document. This accomplishes the desired result of ensuring that these types of concerns are documented and part of the record regarding this permit decision.

The zip code has been changed in the Source Background and Description section.

Source Background and Description

Source Name: Dynamax Corporation
Source Location: 53103 Northland Drive, Elkhart, IN ~~46545~~ **46514**
County: Elkhart
SIC Code: 3716
Operation Permit No.: CP-039-12002-00536
Permit Reviewer: Nishat Hydari / EVP

The Office of Air Management (OAM) has reviewed an application from Dynamax Corporation relating to the construction and operation of a ~~motor home~~ **vehicle** production plant **which includes motor homes, campers, vans, etc.**

The New Emission Units and Pollution Control Equipment section has been revised to include the natural gas fired make up air unit and the general assembly operation. Also, the ten infrared heaters have been deleted.

New Emission Units and Pollution Control Equipment

The source consists of the following emission units and pollution control devices:

- (a) ~~One (1)~~ **Two (2)** natural gas fired make up air unit, identified as MAU-1 and MAU-2, each with a maximum heat input capacity of ~~3.4~~ **6.875** million (MM) British thermal units (Btu) per hour;
- (b) ~~Ten (10) natural gas fired infrared heaters, identified as IR 1 through IR 10, each with a maximum heat input capacity of 0.2 MMBtu per hour;~~

- (eb) Welding operation; one (1) steel MIG welding station, with a maximum wire consumption rate of 0.33 pounds of wire per hour (lb wire/hr), four (4) aluminum MIG welding stations, each with a maximum wire consumption rate of 0.50 lb wire/hr, two (2) oxyacetylene flame cutters, each with a maximum cutting rate of 28 inches per minute, and one (1) plasma cutter, with a maximum cutting rate of 155 inches per minute;
- (ec) Woodworking operation with a maximum throughput of 1085 pounds of wood per hour, which consists of various woodworking equipment; ~~and~~
- (ed) Two (2) paint booths, identified as PB1 and PB2, using HVLP spray guns, using dry filters for overspray control, and exhausting to stacks S1, ~~and S2, S3 and S4-; and~~
- (e) **One (1) general assembly operation, exhausting to general ventilation.**

Due to the addition of the natural gas fired make up air unit and the deletion of the ten infrared heaters, the potential to emit of the source has increased slightly. The potential to emit table has been revised to show this slight increase in emissions.

Potential To Emit

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as “the maximum capacity of a stationary source or emissions unit to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA, the department, or the appropriate local air pollution control agency.”

Pollutant	Potential To Emit (tons/year)
PM	24.69 24.76
PM-10	24.83 25.11
SO ₂	0.04 0.04
VOC	232.85 233.05
CO	4.99 5.06
NO _x	2.37 6.02

Due to the addition of the natural gas fired make up air unit and the deletion of the ten infrared heaters, the source status of the source has increased slightly. The source status table has been revised to show this slight increase in emissions.

Source Status

New Source PSD Definition (emissions after controls, based on 8,760 hours of operation per year at rated capacity and/ or as otherwise limited):

Pollutant	Emissions (ton/yr)
PM	24.69 24.76
PM10	24.83 25.11
SO ₂	0.04 0.04
VOC	232.85 233.05
CO	4.99 5.06
NO _x	2.37 6.02
Single HAP	43.38
Combination HAPs	143.96

- (a) This new source is **not** a major stationary source because no attainment pollutant is emitted at a rate of 250 tons per year or greater and it is not in one of the 28 listed source categories. Therefore, pursuant to 326 IAC 2-2, and 40 CFR 52.21, the PSD requirements do not apply.

The typographical errors under State Rule Applicability - Entire Source have been revised.

State Rule Applicability - Entire Source

326 IAC 2-4.1-1 (New Source Toxics Control)

Side wall lamination, head liners

Adhesives utilized in the side wall lamination and head liner area will be applied with high volume low pressure (HVLP) spray systems or airless air-assisted systems. The use of Hot melt adhesives systems will be utilized in areas that do not need high force ~~clamping~~ **clamping** or that are not contoured in such a way to prohibit proper adhesion.

The following BACT "No Control Option" control measures will also be followed:

Use of Base coat colors 6.2 lb/voc per gallon and Clear coat systems 4.4 lbs/voc per gallon
Use of 1.8 lbs/voc per gallon to zero VOC undercoating systems
Use of Hot melt adhesives and aerosol adhesives ~~where~~ possible
Use of HVLP or equivalent spray equipment in the painting operations
Use of Air-assisted airless or airless or equivalent spray equipment in adhesive applications
Use of Good Housekeeping Practices : Sealed lids on containers not in use or in storage
 Gun and line purging into approved containers
 Organized spill response and cleanup
 Routine maintenance of spray equipment to prevent drips
 leaks, and spills

Conclusion

The construction and operation of this ~~motor home~~ **vehicle** production plant **which includes motor homes, campers, vans, etc.** shall be subject to the conditions of the attached proposed **New Source Construction Permit No. CP 039-12002-00536.**

Indiana Department of Environmental Management Office of Air Management

Technical Support Document (TSD) for a New Source Construction and Operation

Source Background and Description

Source Name: Dynamax Corporation
Source Location: 53103 Northland Drive, Elkhart, IN 46515
County: Elkhart
SIC Code: 3716
Operation Permit No.: CP-039-12002-00536
Permit Reviewer: Nishat Hydari / EVP

The Office of Air Management (OAM) has reviewed an application from Dynamax Corporation relating to the construction and operation of a motor home production plant.

New Emission Units and Pollution Control Equipment

The source consists of the following emission units and pollution control devices:

- (a) One (1) natural gas fired make up air unit, identified as MAU-1, with a maximum heat input capacity of 3.4 million (MM) British thermal units (Btu) per hour;
- (b) Ten (10) natural gas fired infrared heaters, identified as IR 1 through IR 10, each with a maximum heat input capacity of 0.2 MMBtu per hour;
- (c) Welding operation; one (1) steel MIG welding station, with a maximum wire consumption rate of 0.33 pounds of wire per hour (lb wire/hr), four (4) aluminum MIG welding stations, each with a maximum wire consumption rate of 0.50 lb wire/hr, two (2) oxyacetylene flame cutters, each with a maximum cutting rate of 28 inches per minute, and one (1) plasma cutter, with a maximum cutting rate of 155 inches per minute;
- (d) Woodworking operation with a maximum throughput of 1085 pounds of wood per hour, which consists of various woodworking equipment; and
- (e) Two (2) paint booths, identified as PB1 and PB2, using HVLP spray guns, using dry filters for overspray control, and exhausting to stacks S1 and S2.

Unpermitted Emission Units and Pollution Control Equipment

There are no unpermitted facilities operating at this source during this review process.

Stack Summary

Stack ID	Operation	Height (feet)	Diameter (feet)	Flow Rate (acfm)	Temperature (°F)
S1 and S2	Paint booth 1 w/ HVLPs	32	4	30,750 each	ambient
S3 and S4	Paint booth 2 w/ HVLPs	32	4	30,750 each	ambient
GV-1	Foam insulation	0.5	1.5	3,000	ambient
GV2-6	General assembly	20*	4.5	40,000 each	ambient
GV 7 and 8	Welding	20*	2.5	7,500 each	ambient
GV 9 and 10	Paint Mix & Storage	10*	21" square	1,000 each	ambient
GV 11	Water test room	16*	1.33	2,000	ambient
GV 12 and 13	CO exhaust	16	1.17	800 each	ambient

Recommendation

The staff recommends to the Commissioner that the construction and operation be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

A complete application for the purposes of this review was received on March 10, 2000.

Emission Calculations

See Appendix A of this document for detailed emissions calculations (Appendix A, pages 1 through 5).

Potential To Emit

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as “the maximum capacity of a stationary source or emissions unit to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA, the department, or the appropriate local air pollution control agency.”

Pollutant	Potential To Emit (tons/year)
PM	24.69
PM-10	24.83
SO ₂	0.01
VOC	232.85
CO	1.99
NO _x	2.37

HAP's	Potential To Emit (tons/year)
Xylene	43.38
Toluene	30.24
Hexane	11.72
MEK	27.82
Styrene	8.27
Dipropylene glycol	0.22
Dimethyl phthalate	0.07
Methyl methacrylate monomer	10.68
Methylene diphenyl diisocyanate	0.03
Ethyl benzene	6.41
MIK	4.11
Methanol	0.36
Benzene	0.03
Trichloroethylene	0.23
2,4 Toluene diisocyanate	0.00
Hexamethyl 1,6-dissoc	0.34
Manganese	0.05
TOTAL	143.96

- (a) The potential to emit (as defined in 326 IAC 2-7-1(29)) of VOC is equal to or greater than 100 tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7.
- (b) The potential to emit (as defined in 326 IAC 2-7-1(29)) of any single HAP is equal to or greater than ten (10) tons per year and the potential to emit (as defined in 326 IAC 2-7-1(29)) of a combination HAPs is greater than or equal to twenty-five (25) tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7.
- (c) Fugitive Emissions
Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive particulate matter (PM) and volatile organic compound (VOC) emissions are not counted toward determination of PSD and Emission Offset applicability.

County Attainment Status

The source is located in Elkhart County.

Pollutant	Status
PM-10	attainment
SO ₂	attainment
NO ₂	attainment
Ozone	maintenance
CO	attainment
Lead	attainment

- (a) Volatile organic compounds (VOC) and oxides of nitrogen (NO_x) are precursors for the formation of ozone. Therefore, VOC emissions are considered when evaluating the rule applicability relating to the ozone standards. Elkhart County has been designated as maintenance attainment for ozone. Therefore, VOC and NO_x emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.

- (b) Elkhart County has been classified as attainment or unclassifiable for all other criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.
- (c) Fugitive Emissions
Since this type of operation is not one of the 28 listed source categories under 326 IAC 2-2, 40 CFR 52.21, or 326 IAC 2-3 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive particulate matter (PM) and volatile organic compound (VOC) emissions are not counted toward determination of PSD and Emission Offset applicability.

Source Status

New Source PSD Definition (emissions after controls, based on 8,760 hours of operation per year at rated capacity and/ or as otherwise limited):

Pollutant	Emissions (ton/yr)
PM	24.69
PM10	24.83
SO ₂	0.01
VOC	232.85
CO	1.99
NO _x	2.37
Single HAP	43.38
Combination HAPs	143.96

- (a) This new source is **not** a major stationary source because no attainment pollutant is emitted at a rate of 250 tons per year or greater and it is not in one of the 28 listed source categories. Therefore, pursuant to 326 IAC 2-2, and 40 CFR 52.21, the PSD requirements do not apply.

Part 70 Permit Determination

326 IAC 2-7 (Part 70 Permit Program)

This new source is subject to the Part 70 Permit requirements because the potential to emit (PTE) of:

- (a) at least one of the criteria pollutant is greater than or equal to 100 tons per year,
(b) a single hazardous air pollutant (HAP) is greater than or equal to 10 tons per year, or
(c) any combination of HAPs is greater than or equal to 25 tons/year.

This new source shall apply for a Part 70 (Title V) operating permit within twelve (12) months after this source becomes subject to Title V.

Federal Rule Applicability

- (a) There are no New Source Performance Standards (NSPS)(326 IAC 12 and 40 CFR Part 60) applicable to this source.
- (b) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs)(326 IAC 14 and 40 CFR art 63) applicable to this source.

State Rule Applicability - Entire Source

326 IAC 2-4.1-1 (New Source Toxics Control)

Pursuant to 326 IAC 2-4.1-1 (New Source Toxics Control), any new process or production unit, which in and of itself emits or has the potential to emit (PTE) 10 tons per year of any HAP or 25 tons per year of any combination of HAPs, must be controlled using technologies consistent with Maximum Achievable Control Technology (MACT). Pursuant to the rule requirements, the applicant has submitted a Maximum Achievable Control Technology (MACT) analysis for the motor home production operation.

Based on the MACT analysis performed by the source, the MACT for specific processes is described below. Adherence with the MACT conditions will also satisfy 326 IAC 8-1-6 (BACT).

Cleaning and Prepping motor homes exteriors prior to painting, primer applications, and base coat applications:

Motor home and camper exteriors will be hand-wiped with a cleaning solvent prior to the application of the first surface coating system. Cleaning solvents will contain 6.5 lbs/voc/hap per gallon lacquer thinners and prep cleaners.

Primer will be applied using HVLP (high volume-low pressure) or equivalent spray equipment for better transfer efficiency.

Base Coat / Clear coat Application:

Base coat and clear coats will be applied using HVLP (high volume low pressure) or equivalent spray equipment. The base coat / clear coat system will be used on motor homes and campers at this facility. Because mixing supplier coatings creates blistering, chipping, peeling and delamination problems the base coats applied will have a maximum VOC/HAP content of 6.2 lbs voc/hap per gallon applied and the clear coats applied will have a maximum VOC/HAP content of 4.4 lbs voc/hap per gallon applied. Compliance demonstration will be based on required parts in formula mixes.

Chassis Painting

Chassis paints will utilize low VOC/HAP coatings and high transfer efficiency spray equipment. The equipment used could be airless air-assisted or HVLP or equivalent.

Undercoating

Vehicles will be undercoated with a low VOC/HAP undercoat or with a waterborne undercoat. Airless spray equipment or its equivalent will be used for transfer efficiency.

Side wall lamination, head liners

Adhesives utilized in the side wall lamination and head liner area will be applied with high volume low pressure (HVLP) spray systems or airless air-assisted systems. The use of Hot melt adhesives systems will be utilized in areas that do not need high force clamping or that are not contoured in such a way to prohibit proper adhesion.

The following BACT "No Control Option" control measures will also be followed:

Use of Base coat colors 6.2 lb/voc per gallon and Clear coat systems 4.4 lbs/voc per gallon
Use of 1.8 lbs/voc per gallon to zero VOC undercoating systems
Use of Hot melt adhesives and aerosol adhesives were possible
Use of HVLP or equivalent spray equipment in the painting operations
Use of Air-assisted airless or airless or equivalent spray equipment in adhesive applications
Use of Good Housekeeping Practices : Sealed lids on containers not in use or in storage
 Gun and line purging into approved containers
 Organized spill response and cleanup
 Routine maintenance of spray equipment to prevent drips
 leaks, and spills

The options considered in the BACT analysis were:

- (1) Regenerative Thermal Oxidation
- (2) Thermal Oxidation
- (3) Process Changes
- (4) Catalytic Oxidation
- (5) Adsorption
- (6) Biofiltration
- (7) No Control

Options (3) through (6) have been determined to be technically infeasible for the following reasons:

(3) Process Changes

The majority of VOC emissions from the assembly operations are generated from adhesive and lamination processes. Process changes are not technically feasible in these areas. The geometry of the vehicles and sometimes wet conditions of the vehicle interiors make it necessary to use a Hybond adhesive in lieu of urethane or waterborne adhesives. Vehicle safety is also another reason that adhesives used for application of headliners can not be substituted. Substitution of adhesives tend to cause de-lamination problems. Urethane adhesives require high clamping forces during the application process. The vehicle design prohibits effective high clamping forces in these applications. Hot melt adhesives and the use of aerosol cans are already considered forms of pollution prevention efforts.

Process changes in the painting operations are not technically feasible. The use of waterborne coatings was investigated and found not feasible for this operation or geographical area. The drying time of waterborne coatings is dependent on temperature and humidity. Because of the high humidity in this geographical area, it would also require longer drying times. Even with the use of Bake ovens, the product cannot be handled as soon as it can be with solvent based systems. In discussions with other similar like painting operations, many waterborne coating formulations loose gloss and color over a period of time. In certain weather conditions the paints will fade, chip or peel over a period of time as compared to conventional paint systems. Another draw back to utilizing waterborne coatings is the limited assembly factor. Vehicles are assembled piece by piece. They are made up of wood, fiberglass plastic parts, metals, and various rubber parts. Since these vehicles go to the painting areas after assembly, drying times cannot be extended to accommodate the waterborne coatings longer cure times. These assembly materials are considered "heat sensitive materials". Zero VOC undercoating systems are acceptable for use at this facility because of the process flow.

Process changes in the regular high solids base coats and clear coat application are not recommended for these operations in this geographical area. Because of the diversity on the materials covered, the complexity of a multistage paint system and color match problems process changes are technically not feasible for coating systems. Although the truck and bus body industry are utilizing some lower VOC products, customized paint shops, Recreational Vehicle manufacturers and Van Conversion facilities must use higher VOC based products. Currently, 3.5 VOC products do not match OEM colors. Mandating use of these lower VOC products would create an unfair market advantage for this industry. 3.5 Coatings are also used in the Heavy Truck Industry. Currently, truck and bus operations utilize single stage coating systems. Several surface coating suppliers were contacted to research available product information. Dupont representatives have found a 6.2 lb/voc per gallon base coat and a 4.4 lb/voc per gallon Clear coat that will meet this facilities need for mirror like finishes, production flow, heat sensitivity and OEM color specifications.

(4) Catalytic Oxidation

Catalytic Oxidation is not technically feasible for these two processes in this area. The adhesives contain varnishes and the polyurethane paints contain isocyanates that will "poison" or blind the catalyst. Without proper catalyst performance, the operating temperature is not adequate for efficient destruction of VOC. Based on the susceptibility of zeolite contamination or fouling, this option was eliminated from further evaluation.

(5) Adsorption

Adsorption is not technically feasible for these two processes in this area. The adhesives contain varnishes and the polyurethane paints contain isocyanates that will polymerize on the surface of either carbon or zeolite adsorber surfaces, effectively destroying that surface's ability to adsorb or desorb the rest of the VOC. The limitations discussed above effectively eliminate this option from further evaluation.

(6) Biofiltration

Biofiltration is a relatively new technology in the United States. This system is a land intensive setup in which contaminated air is fed under an active bed of soil containing microorganisms. As the air rises through the soil, the microorganisms consume and convert the chemicals to carbon dioxide and water. Biofiltration has been used successfully to control odors in Europe. However, there are only a few applications of biofilters for odor control in the United States. There are some recent applications of Biofiltration for the removal of VOCs from paint exhaust streams. Biofilters are usually associated with much lower air volumes to increase the amount of contamination fed to the microorganisms. The proposed operation will have two paint booths with 61,500 CFM. Also, this operation is intended to run only eight (8) hours a day five (5) days a week. The microorganisms need to be fed contaminated air consistently to keep these bugs alive. Start up and shut down over weekends and at the end of the working day would prohibit the life of the microorganisms. Many times in active soil beds other bacteria begin to thrive and spread disease among the microorganisms intended on converting the chemicals to carbon dioxide and water. For these reasons, biofiltration was eliminated from future consideration.

The technically feasible options are regenerative thermal oxidation, thermal oxidation, carbon Absorption/Thermal Oxidizer combination unit (added on by the source) and no control. A cost analysis was performed to determine the economic feasibility of regenerative thermal oxidation, thermal oxidation and no control. The cost analysis is based on potential VOC emissions of 232.85 tons per year.

The tables below show the results of the cost analysis.

Capital Cost

Option	Base Price	Direct Cost	Indirect Cost	Total
Regenerative Thermal Oxidation	\$2,399,284	\$919,726	\$1,128,464	\$4,447,474
Thermal Oxidation	\$2,651,062	\$1,016,241	\$1,246,882	\$4,914,185
Carbon Absorption/Thermal Oxidizer combination unit	\$1,924,568	\$737,751	\$906,388	\$3,568,707
No Control	--	--	--	--

Annual Operating, Maintenance & Recovery Cost

Option	Direct Cost	Indirect Cost	Total
Regenerative Thermal Oxidation	\$332,635	\$918,037	\$1,250,672
Thermal Oxidation	\$200,958	\$1,012,780	\$1,213,738
Carbon Absorption/Thermal Oxidizer combination unit	\$210,547	\$746,300	\$4,525,554
No Control	--	--	--

Evaluation

Option	Potential Emissions (tons/yr)	Emissions Removed (tons/yr)	Control Efficiency (%)	\$/ton removed
Regenerative Thermal Oxidation	232.85	221.3	95	\$6,656.32
Thermal Oxidation	232.85	221.3	95	\$6,594.88
Carbon Absorption/Thermal Oxidizer combination unit	232.85	221.3	95	\$5,130.06
No Control	232.85	N/A	N/A	N/A

Methodology:

Emissions removed = (limited potential emissions from warehouse) * (control efficiency)

\$/ton removed = total annual cost / emissions removed

The cost breakdown is as follows:

1. Capital Cost
 - a) Base price: instruments and controls, taxes and freight.
 - b) Direct installation cost: support installation, ducting, erection and handling, electrical, piping and insulation.
 - c) Indirect installation cost: engineering, construction expense, construction fee, startup fee, performance test and contingency.

2. Annual Cost
 - a) Direct operating cost: natural gas, electricity, (filter rejuvenation, carbon replacement and replacement labor for the carbon absorption/thermal oxidizer combination unit option), operator labor, supervisor labor, maintenance labor and maintenance materials.
 - b) Indirect operating cost: overhead, property tax, insurance, administration and capital recovery cost (for 10 years life of the system at 10% interest rate).

Use of regenerative thermal oxidation and thermal oxidation would result in Dynamax Corporation having a net loss (before taxes) for the operating year. Thus, these two control technologies are not economically feasible. Use of the carbon absorption/thermal oxidizer combination unit would result in Dynamax Corporation losing approximately 87% of their profits before taxes. Thus, this option too is not economically feasible. Because all other options are technically infeasible or economically infeasible, no VOC emission control with the following work practices have been determined to be the BACT.

The "No Control Option" is the highest ranking feasible measure, therefore, the Best Available Control Technology is determined to be the "No Control Option".

326 IAC 2-6 (Emission Reporting)

This source is subject to 326 IAC 2-6 (Emission Reporting), because it is located in Elkhart County and has the potential to emit more than ten (10) tons per year for of VOC. Pursuant to this rule, the owner/operator of the source must annually submit an emission statement for the source. The annual statement must be received by April 15 of each year and contain the minimum requirement as specified in 326 IAC 2-6-4. The submittal should cover the period defined in 326 IAC 2-6-2(8)(Emission Statement Operating Year).

326 IAC 5-1 (Opacity Limitations)

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Exemptions), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of forty percent (40%) any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings) as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

326 IAC 8-1-6 (New Facilities, General Reduction Requirements)

The motor home production operation is subject to 326 IAC 8-1-6 (New Facilities, General Reduction Requirements), because it has the potential to emit 232.84 tons/yr of VOC which is more than 25 tons/yr. Pursuant to the rule requirements, the applicant has submitted a Best Available Control Technology (BACT) analysis for the material mixing operation.

State Rule Applicability - Individual Facilities

326 IAC 6-3-2 (Process Operations)

- (a) Pursuant to 326 IAC 6-3-2(c), the allowable particulate matter emissions rate from the welding operation not already regulated by 326 IAC 6-1 or any New Source Performance Standard, and which has a maximum process weight rate less than 100 pounds per hour shall not exceed 0.551 pounds per hour.

- (b) Pursuant to 326 IAC 6-3-2(c), the allowable particulate matter emissions rate from the woodworking operation not already regulated by 326 IAC 6-1 or any New Source Performance Standard, and which has a maximum process weight rate less than 100 pounds per hour shall not exceed 0.551 pounds per hour.
- (c) Pursuant to 326 IAC 6-3-2 (Process Operations), particulate matter (PM) from the two (2) paint booths, identified as PB1 and PB2, shall be limited by the following:

Interpolation and extrapolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour and} \\ P = \text{process weight rate in tons per hour}$$

The dry filters shall be in operation at all times the paint booth (PB-1) is in operation, in order to comply with this limit.

Air Toxic Emissions

Indiana presently requests applicants to provide information on emissions of the 188 hazardous air pollutants (HAPs) set out in the Clean Air Act Amendments of 1990. These pollutants are either carcinogenic or otherwise considered toxic and are commonly used by industries. They are listed as air toxics on the Office of Air Management (OAM) Construction Permit Application Form Y.

- (a) This proposed new source will emit levels of air toxics greater than those that constitute major source applicability according to Section 112 of the Clean Air Act. The concentrations of these air toxics were modeled and found to be (in worst case possible) as follows: The concentrations of these air toxics were compared to the Permissible Exposure Limits (PEL) developed by the Occupational Safety and Health Administration (OSHA). The Office of Air Management (OAM) does not have at this time any specific statutory or regulatory authority over these substances.
- (b) See attached calculations for detailed air toxic calculations (Appendix A, page 4).

Conclusion

The construction and operation of this motor home production plant shall be subject to the conditions of the attached proposed **New Source Construction Permit No. CP 039-12002-00536**.

Appendix A: Emission Calculations

Company Name: Dynamax Corporation
Address City IN Zip: 53103 Northland Drive, Elkhart, IN 46515
CP: 039-12002
Plt ID: 039-00536
Reviewer: Nishat Hydari / EVP

Uncontrolled Potential Emissions (tons/year)				
Emissions Generating Activity				
Pollutant	Natural Gas Combustion	Surface Coating Operation	Welding	TOTAL
PM	0.11	23.42	1.23	24.76
PM10	0.46	23.42	1.23	25.11
SO2	0.04	0.00	0.00	0.04
NOx	6.02	0.00	0.00	6.02
VOC	0.33	232.72	0.00	233.05
CO	5.06	0.00	0.00	5.06
total HAPs	0.00	143.91	0.05	143.96
worst case single HAP	0.00	43.38	0.05	43.38
Total emissions based on rated capacity at 8,760 hours/year.				
Controlled Potential Emissions (tons/year)				
Emissions Generating Activity				
Pollutant	Natural Gas Combustion	Surface Coating Operation	Welding	TOTAL
PM	0.11	23.42	1.23	24.76
PM10	0.46	23.42	1.23	25.11
SO2	0.04	0.00	0.00	0.04
NOx	6.02	0.00	0.00	6.02
VOC	0.33	232.72	0.00	233.05
CO	5.06	0.00	0.00	5.06
total HAPs	0.00	143.91	0.05	143.96
worst case single HAP	0.00	43.38	0.05	43.38
Total emissions based on rated capacity at 8,760 hours/year, after control.				

Appendix A: Emissions Calculations
Natural Gas Combustion Only
MM BTU/HR <100

Company Name: Dynamax Corporation
Address City IN Zip: 53103 Northland Drive, Elkhart, IN 46515
CP: 039-12002
Plt ID: 039-00536
Reviewer: Nishat Hydari / EVP

Heat Input Capacity
MMBtu/hr

Potential Throughput
MMCF/yr

13.75

120.5

Facilities	MMBtu/hr
Make Up Air (MAU-1)	6.875
Make Up Air (MAU-2)	6.875
Total	13.75

Pollutant						
Emission Factor in lb/MMCF	PM*	PM10*	SO2	NOx	VOC	CO
	1.9	7.6	0.6	100.0	5.5	84.0
				**see below		
Potential Emission in tons/yr						
	0.11	0.46	0.04	6.02	0.33	5.06

*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.

**Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

Methodology

All emission factors are based on normal firing.

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu

Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (SUPPLEMENT D 3/98)

Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

Material	Density (lb/gal)	Weight % Volatile (H2O & Organics)	Weight % Water	Weight % Organics	Volume % Water	Volume % Non-Volatiles (solids)	Gal of Mat. (gal/unit)	Maximum (units/hour)	Pounds VOC per gallon of coating less water	Pounds VOC per gallon of coating	Potential VOC pounds per hour	Potential VOC pounds per day	Potential VOC tons per year	Particulate Potential (ton/yr)	lb VOC/gal solids	Transfer Efficiency
General Assembly																
22 Fluid Ounce Spray Adhesive	5	80.00%	20.00%	60.0%	12.00%	0.00%	0.13000	0.500	3.41	3.00	0.29	6.84	1.25	0.10	ERR	75%
SM 80 High Strength Adhesive	5.76	87.00%	10.00%	77.0%	6.91%	0.00%	0.07000	0.500	4.76	4.44	0.16	3.73	0.68	0.03	ERR	75%
ABS Cement black	7.16	73.00%	0.00%	73.0%	0.00%	0.00%	0.10000	1.000	5.23	5.23	0.52	12.54	2.29	0.00	ERR	100%
ABS Clear Cleaner	6.66	100.00%	0.00%	100.0%	0.00%	0.00%	0.04000	1.000	6.66	6.66	0.27	6.39	1.17	0.00	ERR	100%
B363 Spray Adhesive	5.7	79.20%	15.00%	64.2%	10.26%	0.00%	0.73000	0.500	4.08	3.66	1.34	32.06	5.85	0.47	ERR	75%
Boss 310 Silicone Sealant	8.66	4.00%	0.00%	4.0%	0.00%	0.00%	0.22000	0.500	0.35	0.35	0.04	0.91	0.17	0.00	ERR	100%
Colorimetric MS-101	7.66	41.40%	0.00%	41.4%	0.00%	0.00%	0.06000	0.500	3.17	3.17	0.10	2.28	0.42	0.00	ERR	100%
Crazy Clean	8.33	8.00%	0.00%	8.0%	0.00%	0.00%	0.14000	0.500	0.67	0.67	0.05	1.12	0.20	0.00	ERR	100%
Cyclo Silicone Spray	5.91	91.75%	0.00%	91.8%	0.00%	0.00%	0.02000	0.500	5.42	5.42	0.05	1.30	0.24	0.01	ERR	75%
Dow Corning 999A Silicone Glazing Sealant, C	8.66	4.00%	0.00%	4.0%	0.00%	0.00%	1.52000	0.500	0.35	0.35	0.26	6.32	1.15	0.00	ERR	100%
Duraglass fiberglass filler	12.99	20.00%	0.00%	20.0%	0.00%	0.00%	0.17000	0.500	2.60	2.60	0.22	5.30	0.97	0.00	ERR	100%
Fill -N- Sand / Light Gray 131s	11.11	41.09%	0.00%	41.1%	0.00%	0.00%	0.04000	0.500	4.57	4.57	0.09	2.19	0.40	0.14	ERR	75%
Final Klean 3909s	8.3	100.00%	94.00%	6.0%	93.66%	0.00%	0.45000	1.000	7.85	0.50	0.22	5.38	0.98	0.00	ERR	100%
Foamseal S7880	9.84	30.00%	0.00%	30.0%	0.00%	0.00%	0.08000	0.500	2.95	2.95	0.12	2.83	0.52	0.00	ERR	100%
GC-33 (Gun Cleaner)	8.2	100.00%	0.00%	100.0%	0.00%	0.00%	0.02000	0.500	8.20	8.20	0.08	1.97	0.36	0.00	ERR	75%
Hi-Point 90 (MEKP) Catalyst	9.25	100.00%	0.00%	100.0%	0.00%	0.00%	0.01000	0.500	9.25	9.25	0.05	1.11	0.20	0.00	ERR	100%
ITW Plexus glue AO420	7.75	3.77%	0.00%	3.8%	0.00%	0.00%	0.74000	0.500	0.29	0.29	0.11	2.59	0.47	3.02	ERR	75%
Lacquer Thinner 3608s	6.61	100.00%	30.00%	70.0%	23.81%	0.00%	0.62000	0.500	6.07	4.63	1.43	34.42	6.28	0.00	ERR	100%
Lite Weight 3 w/ cream hardner	9.95	20.00%	0.00%	20.0%	0.00%	0.00%	1.14000	0.500	1.99	1.99	1.13	27.22	4.97	0.00	ERR	100%
Liquid Nails 601	9.58	35.00%	0.00%	35.0%	0.00%	0.00%	0.03000	0.500	3.35	3.35	0.05	1.21	0.22	0.00	ERR	100%
Old English Scratch Cover Furniture Polish	7.41	100.00%	0.00%	100.0%	0.00%	0.00%	0.00100	0.500	7.41	7.41	0.00	0.09	0.02	0.00	ERR	100%
Polyster Glazing Putty	15	25.00%	0.00%	25.0%	0.00%	0.00%	0.00200	0.500	3.75	3.75	0.00	0.09	0.02	0.00	ERR	100%
PolyLite Polyester Resin	9	38.00%	0.00%	38.0%	0.00%	0.00%	0.31000	0.500	3.42	3.42	0.53	12.72	2.32	0.00	ERR	100%
Premium Adhesive SP6	6.83	72.00%	35.00%	37.0%	28.70%	0.00%	1.14000	0.500	3.54	2.53	1.44	34.57	6.31	1.19	ERR	75%
Prep Sol 3919s	6.4	100.00%	0.00%	100.0%	0.00%	0.00%	0.43000	0.500	6.40	6.40	1.38	33.02	6.03	0.00	ERR	100%
PST Pipe Sealant	10.08	16.90%	0.00%	16.9%	0.00%	0.00%	0.00500	0.500	1.70	1.70	0.00	0.10	0.02	0.00	ERR	100%
RTV 4500 / Silicone - Black	8.66	5.00%	0.00%	5.0%	0.00%	0.00%	0.01000	0.500	0.43	0.43	0.00	0.05	0.01	0.00	ERR	100%
Rubberized Undercoating	7.33	29.20%	0.00%	29.2%	0.00%	0.00%	0.08000	0.500	2.14	2.14	0.09	2.05	0.37	0.23	ERR	75%
Sikaflex 221	9.91	9.00%	0.00%	9.0%	0.00%	0.00%	0.01000	0.500	0.89	0.89	0.00	0.11	0.02	0.00	ERR	100%
Sikaflex 252 Black	9.66	9.77%	0.00%	9.8%	0.00%	0.00%	1.58000	0.500	0.84	0.84	0.75	17.89	3.27	0.00	ERR	100%
Sikaflex 252 White	9.66	9.77%	0.00%	9.8%	0.00%	0.00%	7.28000	0.500	0.94	0.94	3.44	82.45	15.05	0.00	ERR	100%
Sikaflex 255-FC	10	4.40%	0.00%	4.4%	0.00%	0.00%	0.14000	0.500	0.44	0.44	0.03	0.74	0.13	0.00	ERR	100%
Silicone Sealant- Black	8.58	6.07%	0.00%	6.1%	0.00%	0.00%	1.53000	0.500	0.52	0.52	0.40	9.56	1.75	0.00	ERR	100%
Silicone Sealant- Clear	8.58	6.07%	0.00%	6.1%	0.00%	0.00%	0.19000	0.500	0.52	0.52	0.05	1.19	0.22	0.00	ERR	100%
Silicone Sealant- White	8.58	6.07%	0.00%	6.1%	0.00%	0.00%	0.10000	0.500	0.52	0.52	0.03	0.62	0.11	0.00	ERR	100%
Spray N Go - Gloss Black Paint	6.08	85.51%	25.00%	60.5%	18.25%	0.00%	0.11000	0.500	4.50	3.68	0.20	4.86	0.89	0.05	ERR	75%
Spray N Go Dec. Enamel - Flat Black Paint	6.66	90.00%	30.00%	60.0%	23.99%	0.00%	0.09000	0.500	5.26	4.00	0.18	4.32	0.79	0.03	ERR	75%
Spray N Go Decorative Enamel	6.66	72.67%	0.00%	72.7%	0.00%	0.00%	0.04000	0.500	4.84	4.84	0.10	2.32	0.42	0.04	ERR	75%
Spray Rite 16 Fl. Oz. Silicone Spray	5	90.00%	0.00%	90.0%	0.00%	0.00%	0.01000	0.500	4.50	4.50	0.02	0.54	0.10	0.00	ERR	75%
Spray Rite Degreaser & Safety Solvent	10.83	99.00%	0.00%	99.0%	0.00%	0.00%	0.01000	0.500	10.72	10.72	0.05	1.29	0.23	0.00	ERR	75%
StaPut III Spray Adhesive	6.08	75.00%	20.00%	55.0%	14.60%	0.00%	1.47000	0.500	3.92	3.34	2.46	58.99	10.77	1.22	ERR	75%
Titebond Wood Glue	9.16	54.10%	53.80%	0.3%	59.16%	0.00%	0.20000	0.500	0.07	0.03	0.00	0.07	0.01	0.00	ERR	100%
TSS Natural Solvent Clnr.	8.34	74.50%	0.00%	74.5%	0.00%	0.00%	0.01000	0.500	6.21	6.21	0.03	0.75	0.14	0.00	ERR	100%
Underbody Coating*	9.4	55.00%	55.00%	0.0%	62.06%	0.00%	3.00000	1.000	0.00	0.00	0.00	0.00	0.00	2.78	ERR	95%
Urethane Adhesive*	9.16	0.00%	0.00%	0.0%	0.00%	0.00%	0.00300	2.000	0.00	0.00	0.00	0.00	0.00	0.00	ERR	100%
Urethane Sealant #1000 88-4902	9.16	6.85%	0.00%	6.9%	0.00%	0.00%	0.13000	0.500	0.63	0.63	0.04	0.98	0.18	0.00	ERR	100%
Walnut Spray Stain	6.56	86.30%	35.00%	51.3%	27.56%	0.00%	0.01000	0.500	4.85	3.37	0.02	0.40	0.07	0.00	ERR	75%
Yellow Zinc Phosphate	6.49	73.93%	35.00%	38.9%	27.27%	0.00%	0.08000	0.500	3.47	2.53	0.10	2.43	0.44	0.07	ERR	75%
For Large Units - Full Body Paint																
ChromaPremier Sealer	11.14	41.30%	0.00%	41.3%	0.00%	0.00%	1.15000	0.250	4.60	4.60	1.32	31.75	5.79	2.06	ERR	75%
ChromaBase Basecoats	7.14	86.80%	0.00%	86.8%	0.00%	0.00%	4.27000	0.250	6.20	6.20	6.62	158.78	28.98	1.10	ERR	75%
ChromaBase Colors	7.14	86.80%	0.00%	86.8%	0.00%	0.00%	4.27000	0.250	6.20	6.20	6.62	158.78	28.98	1.10	ERR	75%
ChromaClears	7.9	55.70%	0.00%	55.7%	0.00%	0.00%	2.41000	0.250	4.40	4.40	2.65	63.63	11.61	2.31	ERR	75%
For Small Units - Full Body Paint																
ChromaPremier Sealer	11.14	41.30%	0.00%	41.3%	0.00%	0.00%	0.85000	0.250	4.60	4.60	0.98	23.46	4.28	1.52	ERR	75%
ChromaBase Basecoats	7.14	86.80%	0.00%	86.8%	0.00%	0.00%	3.15000	0.250	6.20	6.20	4.88	117.13	21.38	0.81	ERR	75%
ChromaBase Colors	7.14	86.80%	0.00%	86.8%	0.00%	0.00%	3.15000	0.250	6.20	6.20	4.88	117.13	21.38	0.81	ERR	75%
ChromaClears	7.9	55.70%	0.00%	55.7%	0.00%	0.00%	1.78000	0.250	4.40	4.40	1.96	47.00	8.58	1.71	ERR	75%
For Small Units - Stripe Only																
Adhesion Promotor	7.06	99.94%	17.55%	82.4%	14.87%	0.00%	0.25000	0.500	6.83	5.82	0.73	17.45	3.18	0.00	ERR	75%
ChromaPremier Sealer	11.14	41.30%	0.00%	41.3%	0.00%	0.00%	0.13000	0.500	4.60	4.60	0.30	7.18	1.31	0.47	ERR	75%
ChromaBase Colors	7.14	86.80%	0.00%	86.8%	0.00%	0.00%	0.75000	0.500	6.20	6.20	2.32	55.78	10.18	0.39	ERR	75%
ChromaClears	7.9	55.70%	0.00%	55.7%	0.00%	0.00%	0.75000	0.500	4.40	4.40	1.65	39.60	7.23	1.44	ERR	75%
Miscellaneous Paints																
Low VOC Prime 'N Seal	9	53.33%	0.00%	53.3%	0.00%	0.00%	0.13000	0.500	4.80	4.80	0.31	7.49	1.37	0.30	ERR	75%
Variprime Self-Etching Primer	8.14	72.50%	0.00%	72.5%	0.00%	0.00%	0.00300	0.250	5.90	5.90	0.00	0.11	0.02	0.00	ERR	75%

State Potential Emissions Add worst case coating to all solvents

53.13 1275.19 232.72

23.42

*Insignificant Activities

METHODOLOGY

Pounds of VOC per Gallon Coating less Water = (Density (lb/gal) * Weight % Organics) / (1-Volume % water)

Pounds of VOC per Gallon Coating = (Density (lb/gal) * Weight % Organics)

Potential VOC Pounds per Hour = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) (24 hr/day)

Potential VOC Pounds per Day = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) (24 hr/day)

Potential VOC Tons per Year = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) (8760 hr/yr) * (1 ton/2000 lbs)

Particulate Potential Tons per Year = (units/hour) * (gal/unit) * (lbs/gal) * (1-Weight % Volatiles) * (1-Transfer efficiency) (8760 hrs/yr) * (1 ton/2000 lbs)

Pounds VOC per Gallon of Solids = (Density (lbs/gal) * Weight % organics) / (Volume % solids)

Total = Worst Coating + Sum of all solvents used

$$\text{HAPs emission rate (tons/yr)} = \text{Density (lb/gal)} \times \text{Gal of Material (gal/unit)} \times \text{Maximum (unit/hr)} \times \text{Weight \% HAP} \times 8760 \text{ hrs/yr} \times 1 \text{ ton}/2000 \text{ lbs}$$
$$\text{HAPs emission rate (tons/yr)} = \text{Density (lb/gal)} * \text{Gal of Material (gal/unit)} * \text{Maximum (unit/hr)} * \text{Weight \% HAP} * 8760 \text{ hrs/yr} * 1 \text{ ton}/2000 \text{ lbs}$$

Appendix A: Welding and Thermal Cutting

Page 5 of 5 TSD App A

Company Name: Dynamax Corporation
Address City IN Zip: 53103 Northland Drive, Elkhart, IN 46515
Permit No./Plt ID: 039-12002-00536
Reviewer: Nishat Hydari / EVP

PROCESS	Number of Stations	Max. electrode consumption per station (lbs/hr)		EMISSION FACTORS * (lb pollutant / lb electrode)				EMISSIONS (lb/hr)				TOTAL HAPS (lb/hr)
				PM = PM10	Mn	Ni	Cr	PM = PM10	Mn	Ni	Cr	
WELDING												
Steel Metal Inert Gas (MIG) (E70S-3)	1	0.33		0.0052	0.0318	0.0001	0.0001	0.002	0.010494	0.000	0.000033	0.011
Aluminum Metal Inert Gas (MIG) (4043)	4	0.5		0.0107				0.021	0	0.000	0	0.000
FLAME CUTTING	Number of Stations	Max. Metal Thickness Cut (in.)	Max. Metal Cutting Rate (in./minute)	EMISSION FACTORS (lb pollutant/1,000 inches cut, 1" thick)				EMISSIONS (lbs/hr)				TOTAL HAPS (lb/hr)
				PM = PM10	Mn	Ni	Cr	PM = PM10	Mn	Ni	Cr	
Oxyacetylene	2	0.125	28	0.1622	0.0005	0.0001	0.0003	0.068	0.000	0.000	0.000	0.000
Plasma	1	0.125	155	0.1622	0.0005	0.0001	0.0003	0.189	0.000	0.000	0.000	0.000
EMISSION TOTALS								PM = PM10	Mn	Ni	Cr	Total HAPs
Potential Emissions lbs/hr								0.28	0.01	0.00	0.00	0.01
Potential Emissions lbs/day								6.72	0.25	0.00	0.00	0.26
Potential Emissions tons/year								1.23	0.05	0.00	0.00	0.05

METHODOLOGY

*Emission Factors are default values for carbon steel unless a specific electrode type is noted in the Process column. Consult AP-42 or other reference for different electrode types.

Welding emissions, lb/hr: (# of stations)(max. lbs of electrode used/hr/station)(emission factor, lb. pollutant/lb. of electrode used)

Cutting emissions, lb/hr: (# of stations)(max. metal thickness, in.)(max. cutting rate, in./min.)(60 min./hr.)(emission factor, lb. pollutant/1,000 in. cut, 1" thick)

Emissions, lbs/day = emissions, lbs/hr x 24 hrs/day

Emissions, tons/yr = emissions, lb/hr x 8,760 hrs/day x 1 ton/2,000 lbs.

Plasma cutting emission factors are from the American Welding Society study published in Sweden (March 1994).

Welding and other flame cutting emission factors are from an internal training session document.

See AP-42, Chapter 12.19 for additional emission factors for welding.